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=> fil reg; d stat que l3; fil capl; d que nos 17
FILE 'REGISTRY' ENTERED AT 11:53:04 ON 11 JUL 2003
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STRUCTURE FILE UPDATES:     9 JUL 2003  HIGHEST RN 545225-95-4
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PROPERTIES for more information.  See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

L1                  STR
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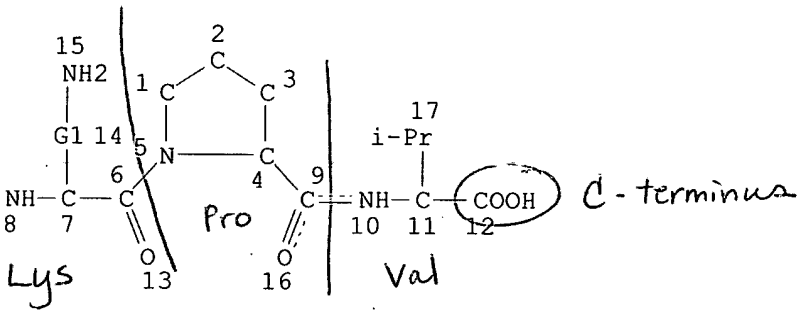


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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  17

STEREO ATTRIBUTES: NONE
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100.0% PROCESSED 168665 ITERATIONS                    119 ANSWERS
SEARCH TIME: 00.00.04


FILE 'CAPLUS' ENTERED AT 11:53:05 ON 11 JUL 2003
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FILE COVERS 1907 - 11 Jul 2003 VOL 139 ISS 3
FILE LAST UPDATED: 10 Jul 2003 (20030710/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L6         177 SEA FILE=CAPLUS ABB=ON  L3
L7          79 SEA FILE=CAPLUS ABB=ON  L6 NOT PY>1999
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=> d ibib abs hitseq l7 1-79; fil hom

L7 ANSWER 1 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:719185 CAPLUS
DOCUMENT NUMBER: 134:36635
TITLE: Use of a cell-based, lawn format assay to rapidly screen a 442,368 bead-based peptide library
AUTHOR(S): Jayawickreme, C. K.; Sauls, H.; Bolio, N.; Ruan, J.; Moyer, M.; Burkhart, W.; Marron, B.; Rimele, T.; Shaffer, J.
CORPORATE SOURCE: Departments of Receptor Biochemistry, Glaxo Wellcome Research and Development, Research Triangle Park, NC, 27709, USA
SOURCE: Journal of Pharmacological and Toxicological Methods (1999), 42(4), 189-197
CODEN: JPTMEZ; ISSN: 1056-8719
PUBLISHER: Elsevier Science Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A cell-based, lawn format assay utilizing an in situ photocleavage method has been developed that allows the rapid examn. of large bead-based compd. libraries as discrete mols. The format uses frog melanophore cells in a contiguous, adherent, confluent layer in small petri dishes covered with a 0.5-1-mm layer of agarose contg. 130 .mu. diam. TentaGel beads at a d. of 2-20 beads/mm2. Employing this technique a 9-mer, 442,368-member peptide library (designed around the 13 amino acid .alpha.-MSH peptide sequence) made up of 12 sep. pools of 36,864 peptides/pool was assayed. Initially, a fraction (.apprx.10%) of each pool was scanned (.apprx.3700 beads from each pool) in 60-mm petri dishes to identify the most active pools. Upon direct photocleavage of the beads with UV light (365 nm), each petri dish was photographed over a 60-min period with a CCD camera to record changes in light intensity as an index of melanosome dispersion. Active beads were those that were surrounded by a localized decrease in light transmittance indicating melanosome dispersed cells. Upon examn. with a dissecting microscope, single beads centrally located to a circular array of dispersed cells were identified and removed from the agarose and sequenced by Edman degrdn. to det. the peptide sequence. Re-synthesized peptides were re-examd. against .alpha.-MSH receptor to confirm and quantify the activity. Several 9-mer peptides were identified with potencies similar to the natural 13-mer peptide. This method allows for

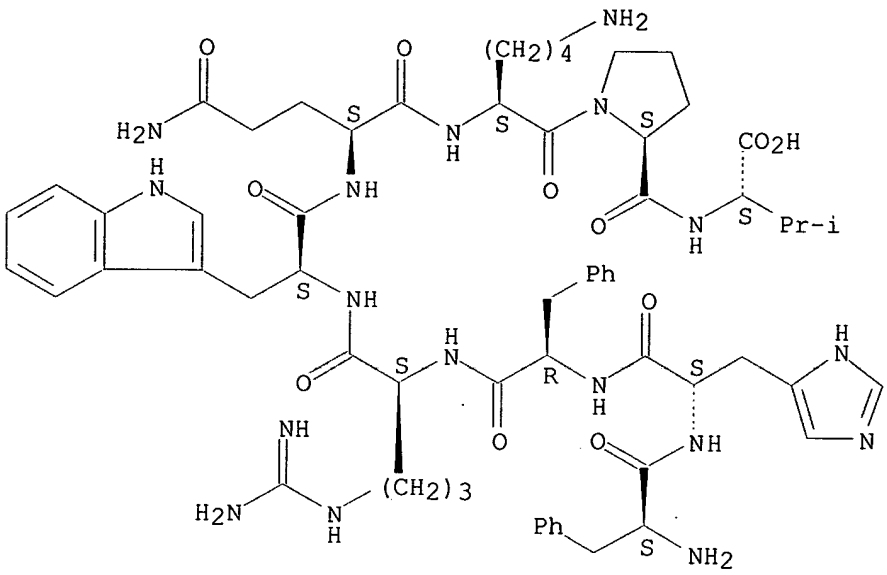
the rapid screening of large bead-based photo-cleavable peptide libraries with the advantage that each compd. is screened as a discrete mol. in a well-less format.

IT **313222-05-8 313222-61-6**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(use of a cell-based, lawn format assay to rapidly screen a 442,368 bead-based peptide library)

RN 313222-05-8 CAPLUS
CN L-Valine, L-phenylalanyl-L-histidyl-D-phenylalanyl-L-arginyl-L-tryptophyl-L-glutaminyl-L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

SEQ 1 FHFRWQKPV

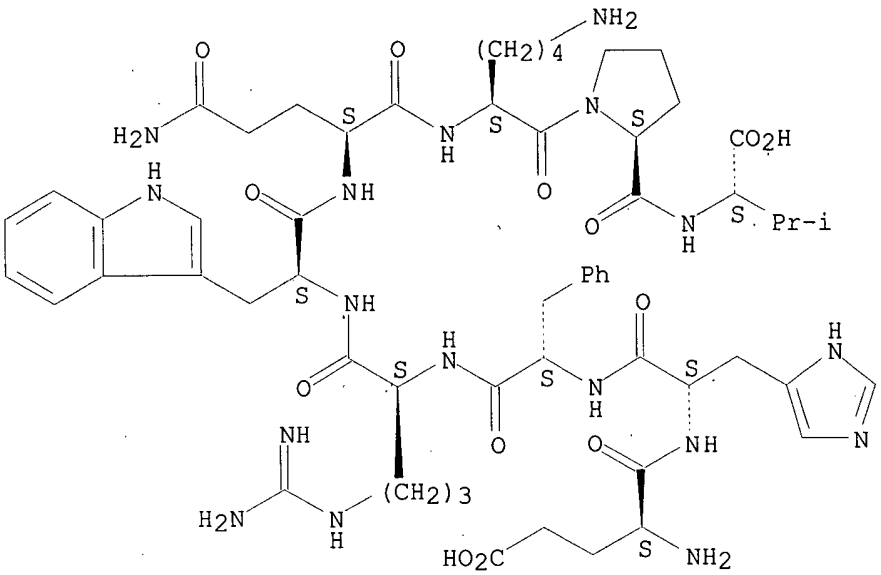
Absolute stereochemistry.



RN 313222-61-6 CAPLUS
CN L-Valine, L-.alpha.-glutamyl-L-histidyl-L-phenylalanyl-L-arginyl-L-tryptophyl-L-glutaminyl-L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

SEQ 1 EHFRWQKPV

Absolute stereochemistry.



REFERENCE COUNT: 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:618605 CAPLUS
DOCUMENT NUMBER: 131:256327
TITLE: Cloning and expression of gene for surface protein antigen of Erysipelothrix rhusiopathiae and detection of E. rhusiopathiae
INVENTOR(S): Makino, Soichi
PATENT ASSIGNEE(S): Chisso Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11262391	A2	19990928	JP 1998-67258	19980317

PRIORITY APPLN. INFO.: JP 1998-67258 19980317

AB The gene encoding a 606-amino-acid surface protein antigen of E. rhusiopathiae strain Tama96; which may also belong to serotypes 1a, 1b, 2, 5, 8, 9,11, 12, 13, 15, 16, 17, or N; is isolated. Claimed are methods of recombinant prepn. of the protein in transgenic Escherichia coli, use of the protein antigen for detecting E. rhusiopathiae by immunoassay, and use of the oligonucleotide primers/probes derived from the gene for detecting E. rhusiopathiae.

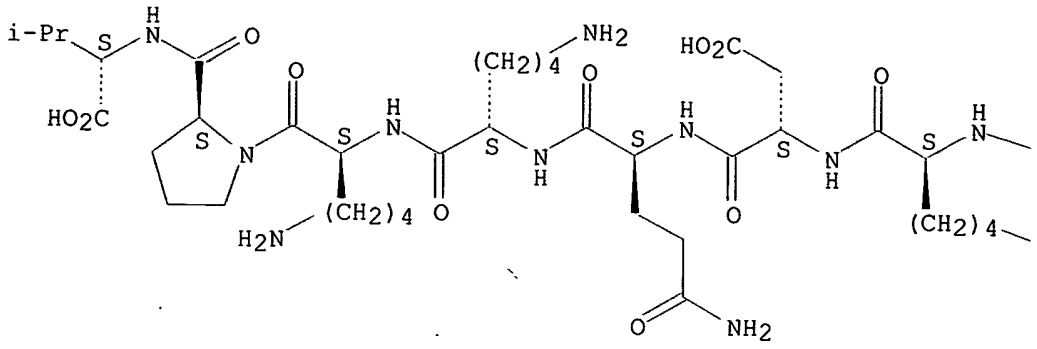
IT **244623-10-7**
RL: PRP (Properties)
(unclaimed sequence; cloning and expression of gene for surface protein antigen of Erysipelothrix rhusiopathiae and detection of E. rhusiopathiae)

RN 244623-10-7 CAPLUS
CN L-Valine, L-prolyl-L-lysyl-L-.alpha.-aspartyl-L-glutaminyl-L-lysyl-L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

SEQ 1 PKDQKKPV

Absolute stereochemistry.

PAGE 1-A



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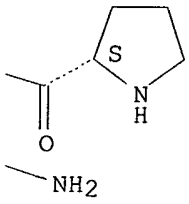


L7 ANSWER 3 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:617115 CAPLUS
DOCUMENT NUMBER: 131:335510
TITLE: Studies on activities of invariant chain peptides on releasing or exchanging of antigenic peptides at human leukocyte antigen-DR1
AUTHOR(S): Xu, Minzhen; Jackson, Robert; Adams, Sharlene; Humphreys, Robert E.
CORPORATE SOURCE: Antigen Express, Inc., Worcester, MA, 01605, USA
SOURCE: Arzneimittel-Forschung (1999), 49(9), 791-799
CODEN: ARZNAD; ISSN: 0004-4172
PUBLISHER: Editio Cantor Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English

AB An invariant chain peptide (Ii77-92; YRMKLPKSAKPVSQMR; 'Ii-Key') enhances 10-50 times baseline levels, the presentation of synthetic antigenic peptides to murine T cell hybridomas, by an exchange mechanism at cell surface MHC class II mols. Two differing activities, to promote the release of antigenic peptide in the presence or absence in soln. of a 2nd antigenic peptide, were characterized with truncation homologs through assays for release or binding of human myelin basic protein biotinylated (*) peptide 90-102 on purified HLA-DR1: (1) release of bound hMBP *peptide from DR1 in the presence or absence of free hMBP peptide in soln., (2) exchange of hMBP *peptide from soln. with hMBP peptide on DR1, and (3) binding of hMBP *peptide to 'empty' DR1. Peptides such as Ii81-88, LPKSAKPV, released prebound hMBP *peptide from DR1 without free hMBP peptide in soln. They also exchanged hMBP *peptide from soln. for prebound hMBP peptide. Peptides including hIi77-83, LRMKLPK, released

hMBP *peptide only when free hMBP peptide was in soln. Nevertheless, hIi77-85, LRMKLPKPP, released hMBP peptide without hMBP peptide in soln. Either type of peptide accelerated hMBP *peptide binding to 'empty' DR1. Competitive binding assays with hMBP *peptide or several *Ii-Key truncation homologs, with resp. non biotinylated forms, demonstrated that the Ii77-83, LRMKLPK, binding site was distinct from the HLA-DR1 antigenic peptide binding site.

IT **250139-34-5**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(invariant chain peptide activities on releasing or exchanging of antigenic peptides at HLA-DR1)

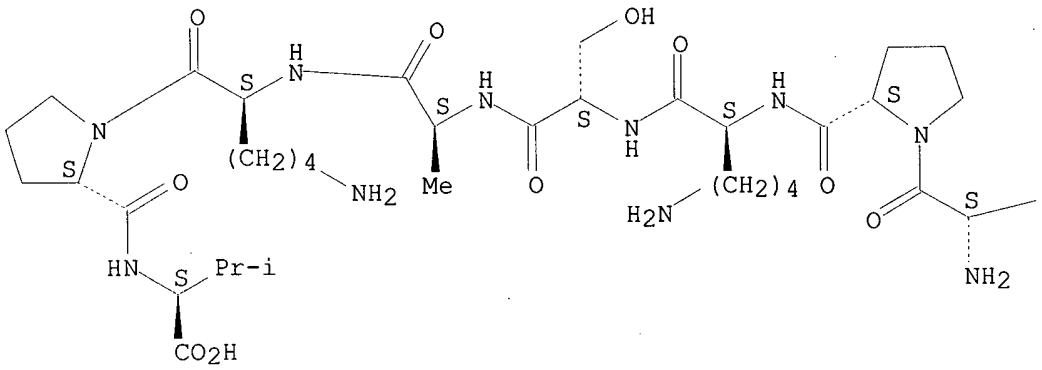
RN 250139-34-5 CAPLUS

CN L-Valine, L-leucyl-L-prolyl-L-lysyl-L-seryl-L-alanyl-L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

SEQ 1 LPKSAKPV

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

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REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:574587 CAPLUS
DOCUMENT NUMBER: 132:20196
TITLE: Molecular Cloning of Lungfish Proopiomelanocortin cDNA
AUTHOR(S): Amemiya, Yutaka; Takahashi, Akiyoshi; Meguro, Hiroshi; Kawauchi, Hiroshi
CORPORATE SOURCE: Laboratory of Molecular Endocrinology, School of Fisheries Sciences, Kitasato University, Sanriku,

Iwate, 022-0101, Japan
SOURCE: General and Comparative Endocrinology (1999), 115(3), 415-421
CODEN: GCENA5; ISSN: 0016-6480
PUBLISHER: Academic Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB To investigate the evolution of proopiomelanocortin (POMC) from fish to tetrapods, nucleotide sequence of POMC cDNA from a lobe-finned fish, the African lungfish, was detd. POMC cDNA was prepd. from lungfish pituitary glands. The POMC cDNA is composed of 1114 bp, excluding a poly-A tail, and encodes 255 amino acids (aa) including a signal peptide of 25 aa. The lungfish POMC contains the segment corresponding to .gamma.-melanotropin (MSH), corticotropin, .alpha.-MSH, .beta.-MSH, and .beta.-endorphin at positions (50-61), (108-146), (108-120), (178-194), and (197-230), resp. The lungfish POMC shows greater sequence identity on av. with amphibian (62%), ancient ray-finned fishes including acipenseriformes and semionotiformes (62%), and mammalian POMC (52%) than with teleostean (49%), elasmobranch (46%), and agnathan POMC (31%). Thus, the overall structural feature of lungfish POMC is close to the tetrapod POMCs which contain .gamma.-MSH and the ancient ray-finned fishes POMCs contg. .gamma.-MSH-like sequence. However, amino acid sequence of lungfish .beta.-endorphin exhibits properties which are specifically obsd. in the ray-finned fishes and the elasmobranchs. (c) 1999 Academic Press.

IT **22006-64-0**, .alpha.1-13-Corticotropin
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(amino acid sequence; mol. cloning and sequence of African lungfish (Protopterus annectens) proopiomelanocortin cDNA)

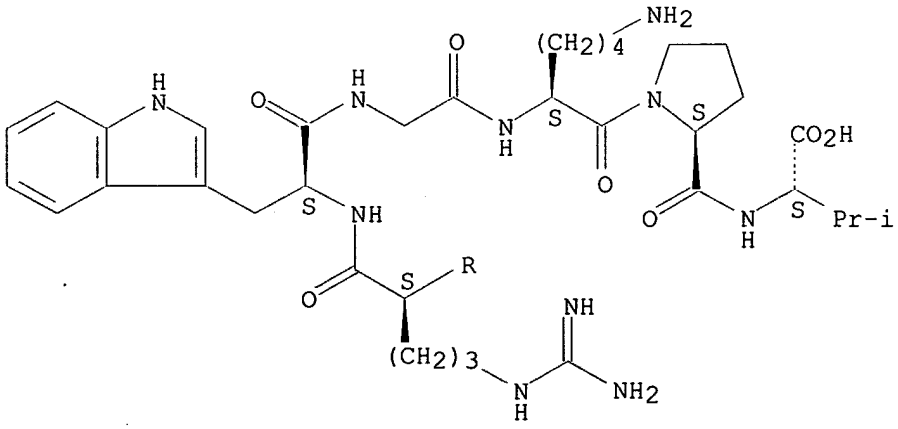
RN 22006-64-0 CAPLUS

CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



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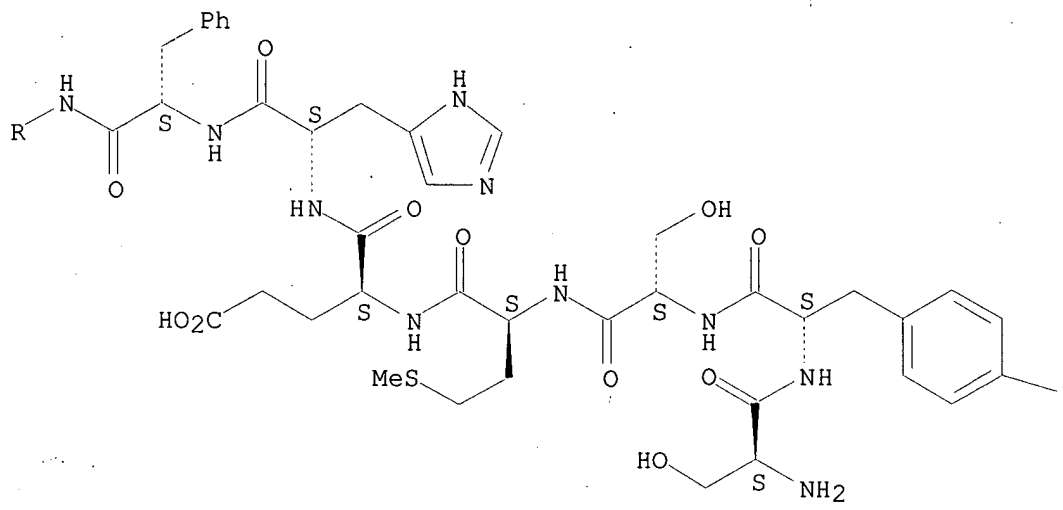

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REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 5 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:547428 CAPLUS
DOCUMENT NUMBER: 131:281757
TITLE: Agonist-dependent desensitization of the .kappa. opioid receptor by G protein receptor kinase and .beta.-arrestin
AUTHOR(S): Appleyard, Suzanne M.; Celver, Jeremy; Pineda, Victor; Kovoor, Abraham; Wayman, Gary A.; Chavkin, Charles
CORPORATE SOURCE: Department of Pharmacology, University of Washington, Seattle, WA, 98195-7280, USA
SOURCE: Journal of Biological Chemistry (1999), 274(34), 23802-23807
CODEN: JBCHA3; ISSN: 0021-9258
PUBLISHER: American Society for Biochemistry and Molecular Biology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The authors used the Xenopus oocyte expression system to examine the

regulation of rat .kappa. opioid receptor (rKOR) function by G protein receptor kinases (GRKs). .kappa. Agonists increased the conductance of G protein-activated inwardly rectifying potassium channels in oocytes co-expressing KOR with Kir3.1 and Kir3.4. In the absence of added GRK and .beta.-arrestin 2, desensitization of the .kappa. agonist-induced potassium current was modest. Co-expression of either GRK3 or GRK5 along with .beta.-arrestin 2 significantly increased the rate of desensitization, whereas addn. of either .beta.-arrestin 2, GRK3, or GRK5 alone had no effect on the KOR desensitization rate. The desensitization was homologous as co-expressed .delta. opioid receptor-evoked responses were not affected by KOR desensitization. The rate of GRK3/.beta.-arrestin 2-dependent desensitization was reduced by truncation of the C-terminal 26 amino acids, KOR(Q355.DELTA.). In contrast, substitution of Ala for Ser within the third intracellular loop [KOR(S255A,S260A,S262A)] did not reduce the desensitization rate. Within the C-terminal region, KOR(S369A) substitution significantly attenuated desensitization, whereas the KOR(T363A) and KOR(S356A,T357A) point mutations did not. These results suggest that co-expression of GRK3 or GRK5 and .beta.-arrestin 2 produced homologous, agonist-induced desensitization of the .kappa. opioid receptor by a mechanism requiring the phosphorylation of the serine 369 of rKOR.

IT **246225-35-4**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(rat .kappa. opioid receptor C-terminal tail; agonist-dependent desensitization of .kappa. opioid receptor by G protein receptor kinase and .beta.-arrestin)

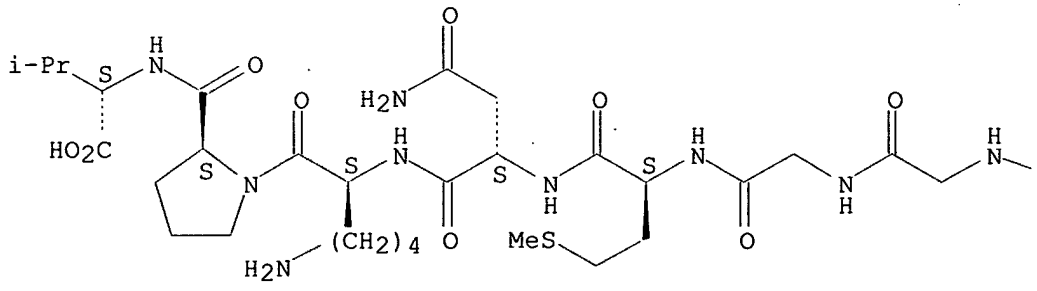
RN 246225-35-4 CAPLUS

CN L-Valine, L-glutaminyl-L-seryl-L-threonyl-L-asparaginyl-L-arginyl-L-valyl-L-arginyl-L-asparaginyl-L-threonyl-L-valyl-L-glutaminyl-L-.alpha.-aspartyl-L-prolyl-L-alanyl-L-seryl-L-methionyl-L-arginyl-L-.alpha.-aspartyl-L-valylglycylglycyl-L-methionyl-L-asparaginyl-L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

SEQ 1 QSTNRVRNTV QDPASMRDVG GMNKPV

Absolute stereochemistry.

PAGE 1-A



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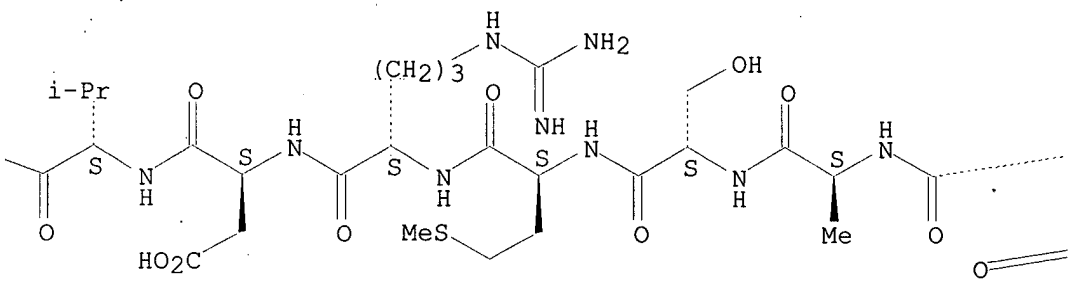

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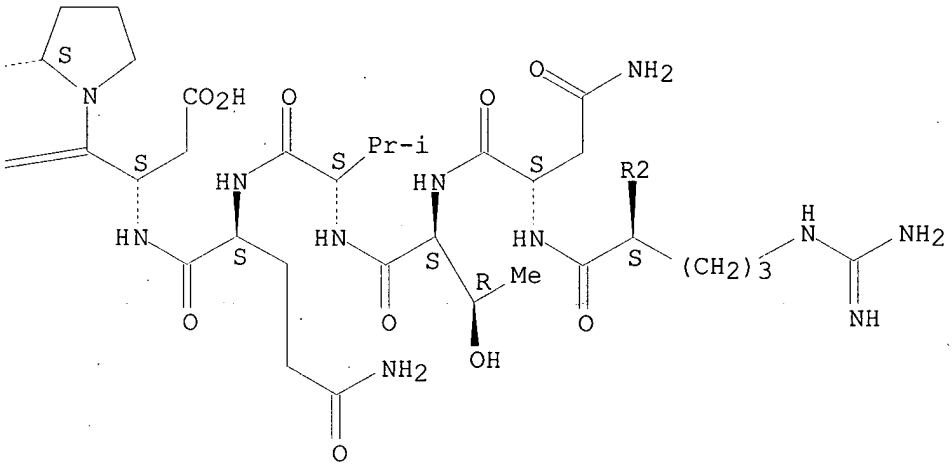

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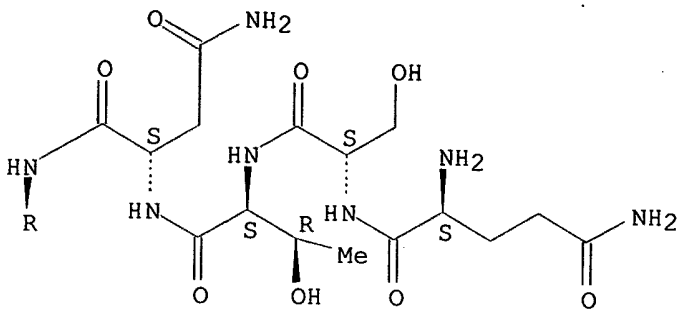
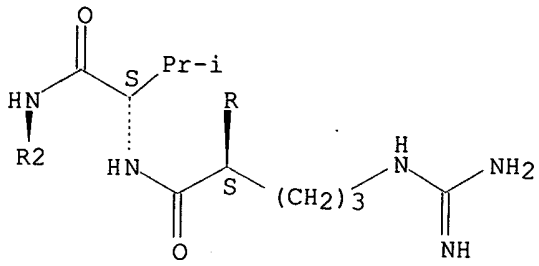




REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 6 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:341433 CAPLUS
DOCUMENT NUMBER: 131:97811
TITLE: .alpha.-MSH and its receptors in regulation of tumor necrosis factor-.alpha. production by human monocyte/macrophages
AUTHOR(S): Taherzadeh, S.; Sharma, S.; Chhajlani, V.; Gantz, I.; Rajora, N.; Demitri, M. T.; Kelly, L.; Zhao, H.; Ichiyama, T.; Catania, A.; Lipton, J. M.
CORPORATE SOURCE: Departments of Physiology and Anesthesiology and Pain Management, University of Texas Southwestern Medical Center at Dallas, Dallas, TX, 75235-9040, USA
SOURCE: American Journal of Physiology (1999), 276(5, Pt. 2), R1289-R1294
CODEN: AJPHAP; ISSN: 0002-9513
PUBLISHER: American Physiological Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The hypothesis that macrophages contain an autocrine circuit based on melanocortin [ACTH and .alpha.-MSH] peptides has major implications for neuroimmunomodulation research and inflammation therapy. To test this hypothesis, cells of the THP-1 human monocyte/macrophage line were stimulated with lipopolysaccharide (LPS) in the presence and absence of .alpha.-MSH. The inflammatory cytokine tumor necrosis factor (TNF)-.alpha. was inhibited in relation to .alpha.-MSH concn. Similar inhibitory effects on TNF-.alpha. were obsd. with ACTH peptides that contain the .alpha.-MSH amino acid sequence and act on melanocortin receptors. Nuclease protection assays indicated that expression of the human melanocortin-1 receptor subtype (hMC-1R) occurs in THP-1 cells; Southern blots of RT-PCR product revealed that addnl. subtypes, hMC-3R and hMC-5R, also occur. Incubation of resting macrophages with antibody to hMC-1R increased TNF-.alpha. concn.; the antibody also markedly reduced the inhibitory influence of .alpha.-MSH on TNF-.alpha. in macrophages

treated with LPS. These results in cells known to produce .alpha.-MSH at rest and to increase secretion of the peptide when challenged are consistent with an endogenous regulatory circuit based on melanocortin peptides and their receptors. Targeting of this neuroimmunomodulatory circuit in inflammatory diseases in which myelomonocytic cells are prominent should be beneficial.

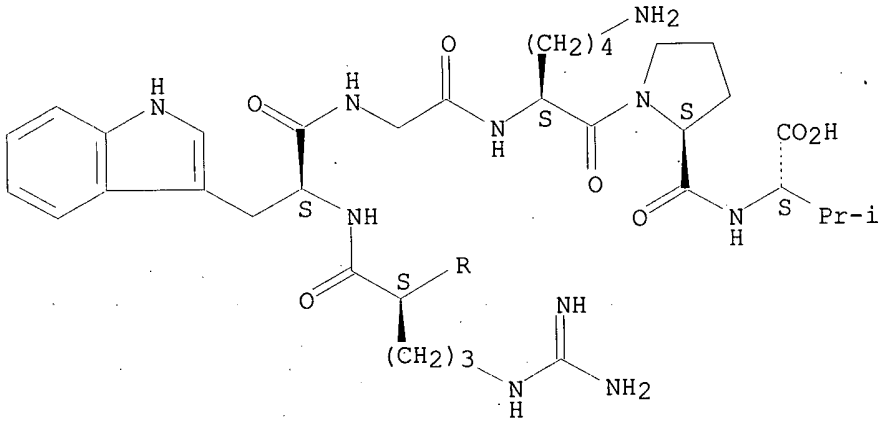
IT **22006-64-0**, ACTH 1-13
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(.alpha.-MSH and receptors in regulation of tumor necrosis factor-.alpha. prodn. by human monocyte/macrophages)

RN 22006-64-0 CAPLUS
CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



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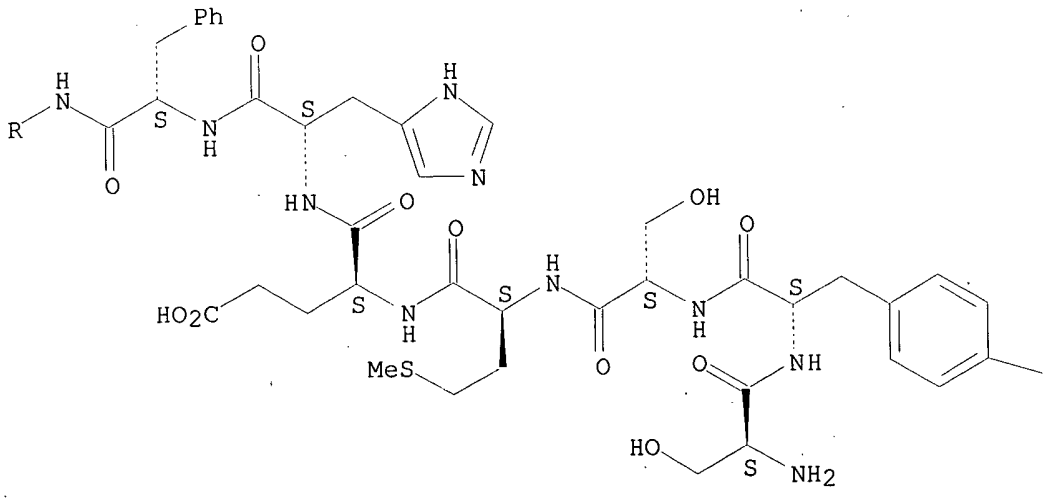

PAGE 2-B

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REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 7 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:176941 CAPLUS
DOCUMENT NUMBER: 130:222122
TITLE: Inhibition of cerebral tissue factor mediated reperfusion damage by neutralizing monoclonal antibodies
INVENTOR(S): Del Zoppo, Gregory J.
PATENT ASSIGNEE(S): The Scripps Research Institute, USA
SOURCE: U.S., 29 pp., Cont. of U.S. Ser. No. 987,637, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5879677	A	19990309	US 1995-372887	19950113

PRIORITY APPLN. INFO.: US 1992-987637 19921209

AB The author discloses monoclonal antibodies directed to human tissue factor. In an exptl. model of tissue factor-mediated reperfusion damage, administration of tissue factor-specific monoclonal antibodies prevented the loss of microvessel patency obsd. in untreated controls.

IT **121357-13-9**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(as inhibitor of human tissue factor)

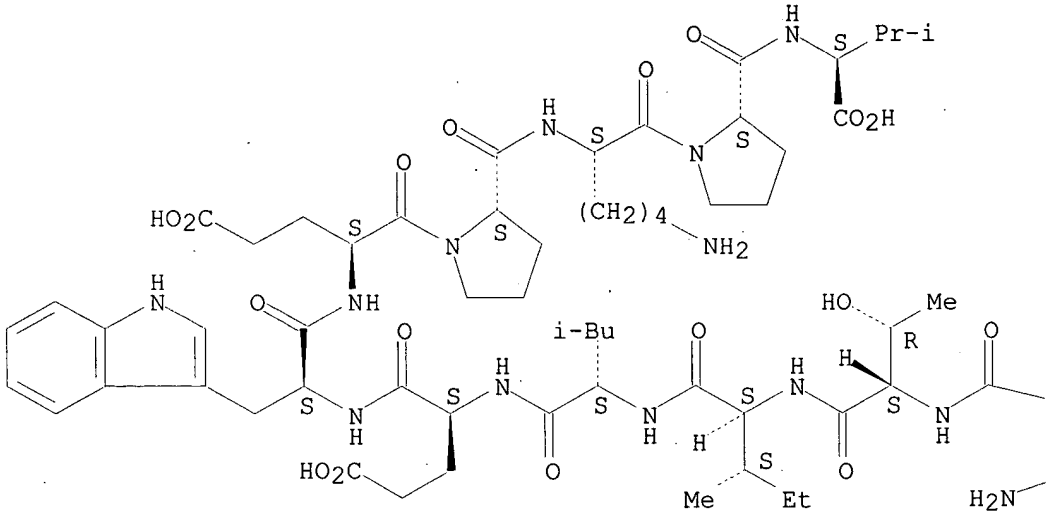
RN 121357-13-9 CAPLUS

CN L-Valine, L-serylglycyl-L-threonyl-L-threonyl-L-asparaginyl-L-threonyl-L-valyl-L-alanyl-L-alanyl-L-tyrosyl-L-asparaginyl-L-leucyl-L-threonyl-L-tryptophyl-L-lysyl-L-seryl-L-threonyl-L-asparaginyl-L-phenylalanyl-L-lysyl-L-threonyl-L-isoleucyl-L-leucyl-L-.alpha.-glutamyl-L-tryptophyl-L-.alpha.-glutamyl-L-prolyl-L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

SEQ 1 SGTTNTVAAY NLTWKSTNFK TILEWEPKPV

Absolute stereochemistry.

PAGE 1-A



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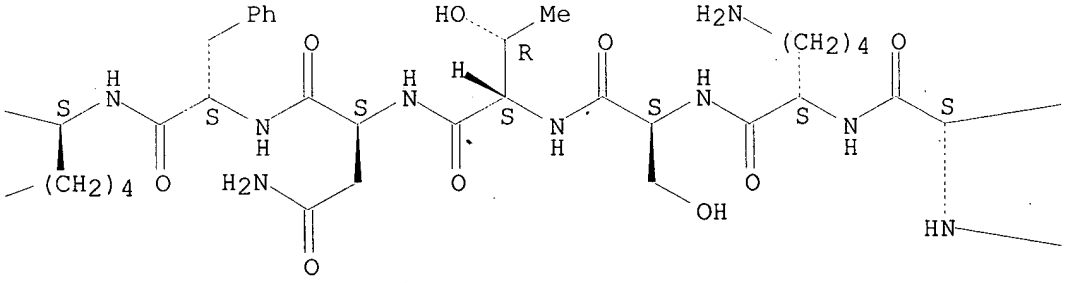

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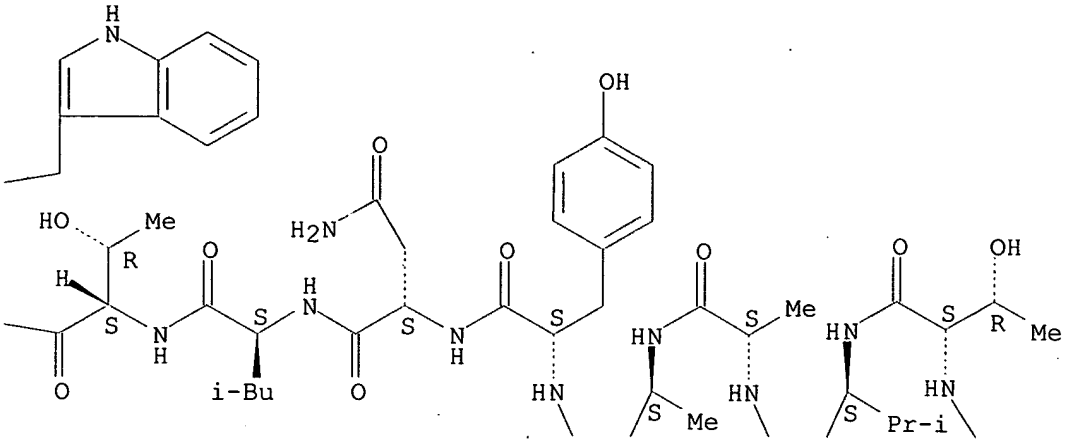

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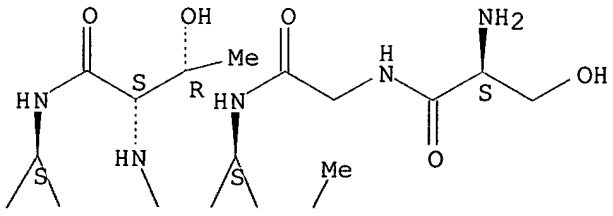

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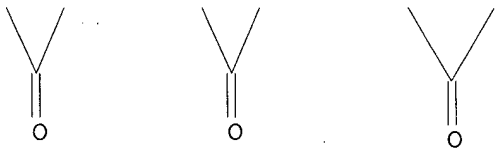

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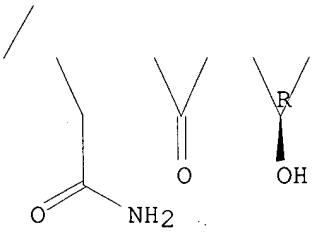


REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

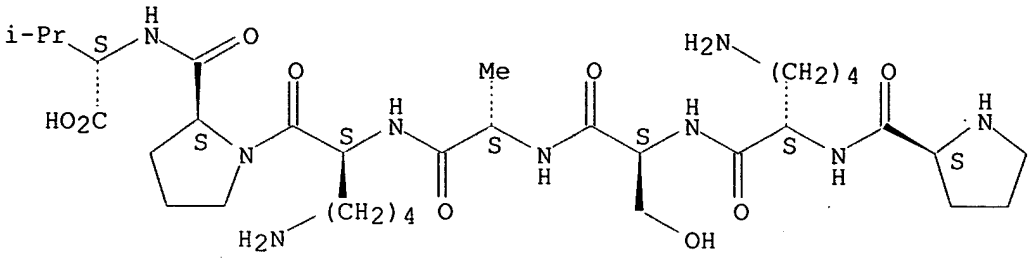
L7 ANSWER 8 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:211616 CAPLUS
DOCUMENT NUMBER: 129:3657
TITLE: Identification of a sequence that mediates promiscuous binding of invariant chain to MHC class II allotypes
AUTHOR(S): Siebenkotten, Ina M.; Carstens, Cornelia; Koch, Norbert
CORPORATE SOURCE: Division of Immunobiology, University of Bonn, Bonn, D53117, Germany
SOURCE: Journal of Immunology (1998), 160(7), 3355-3362
CODEN: JOIMA3; ISSN: 0022-1767
PUBLISHER: American Association of Immunologists
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The invariant chain (Ii) shows promiscuous binding to a great variety of MHC class II allotypes. In contrast, the affinities of the Ii-derived fragments, class II-assocd. Ii peptides, show large differences in binding to class II allotypes. The promiscuous assocn. of Ii to class II polypeptides therefore requires an addnl. contact site to stabilize the interaction to the polymorphic class II cleft. The authors constructed recombinant mols. contg. the class II binding site of Ii (CBS) and tested their assocn. with HLA-DR dimers. The CBS fused to the transferrin receptor mediates binding of transferrin receptor-CBS to class II dimers. Within the CBS, deletion of a sequence N-terminal to the groove-binding motif abolished binding of Ii to DR. A promiscuous class II binding site was identified by reinsertion of the N-terminal residues, amino acids 81-87, of Ii into an Ii mutant that lacks the groove-binding segment. DR allotype-dependent assocn. of Ii was achieved by insertion of antigenic sequences. The promiscuous assocn., in contrast to the class II allotype-dependent binding of Ii, is important to prevent interaction of class II dimers to nascent polypeptides in the endoplasmic reticulum.

IT **207392-38-9**
RL: PRP (Properties)
(sequence that mediates promiscuous binding of invariant chain to MHC class II allotypes)
RN 207392-38-9 CAPLUS
CN L-Valine, L-prolyl-L-lysyl-L-seryl-L-alanyl-L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

SEQ 1 PKSAKPV

Absolute stereochemistry.



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L7 ANSWER 9 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:649129 CAPLUS
DOCUMENT NUMBER: 127:326665
TITLE: The melanocortin 1, 3, 4 or 5 receptors do not have a binding epitope for ACTH beyond the sequence of .alpha.-MSH
AUTHOR(S): Schioth, H. B.; Muceniece, R.; Larsson, M.; Wikberg, J. E. S.
CORPORATE SOURCE: Dep. Pharmaceutical Pharmacology, Uppsala Univ., Uppsala, Swed.
SOURCE: Journal of Endocrinology (1997), 155(1), 73-78
CODEN: JOENAK; ISSN: 0022-0795
PUBLISHER: Journal of Endocrinology
DOCUMENT TYPE: Journal
LANGUAGE: English

AB ACTH(1-39), and several shorter N- and/or C-terminally truncated fragments of ACTH, with and without N-terminal acetylation and/or C-terminal amidation, were tested for binding on a single eukaryotic cell line transiently and independently expressing the melanocortin MC1, MC3, MC4 and MC5 receptors. The results show that none of these MC receptors has specific binding epitopes for the ACTH peptides beyond the amino acid sequence of .alpha.-MSH, when tested for their ability to compete with 125I-labeled [Nle4,D-Phe7].alpha.-MSH and ACTH. The MC3 receptor favors the natural desacetylated N-terminal end of the ACTH peptides, and it has generally more than 10-fold higher affinity for the ACTH peptides than the MC4 receptor. Considering earlier anatomical localization data, together with the present data, we suggest that the MC3 receptor is the most likely candidate of the MC receptors to mediate the short-loop neg. feedback release of corticotrophin-releasing factor (CRF) caused by ACTH/MSH peptides.

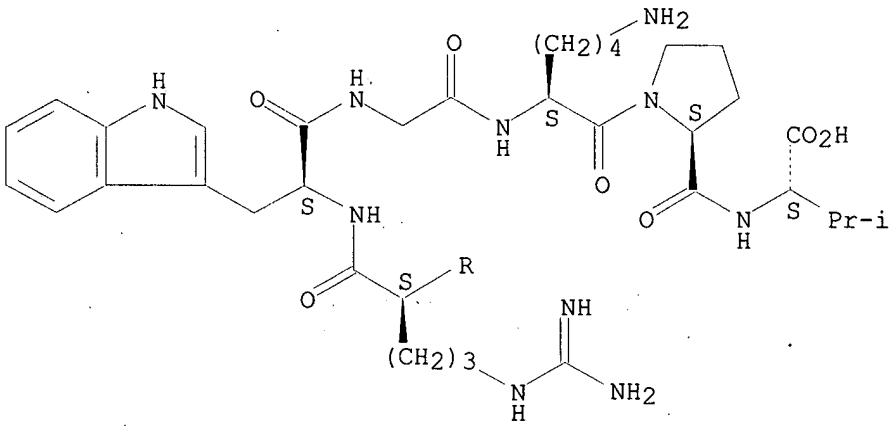
IT **10466-28-1**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(melanocortin 1, 3, 4 or 5 receptors do not have a binding epitope for ACTH beyond sequence of .alpha.-MSH)
RN 10466-28-1 CAPLUS
CN .alpha.-Melanotropin (swine), 13-L-valine- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



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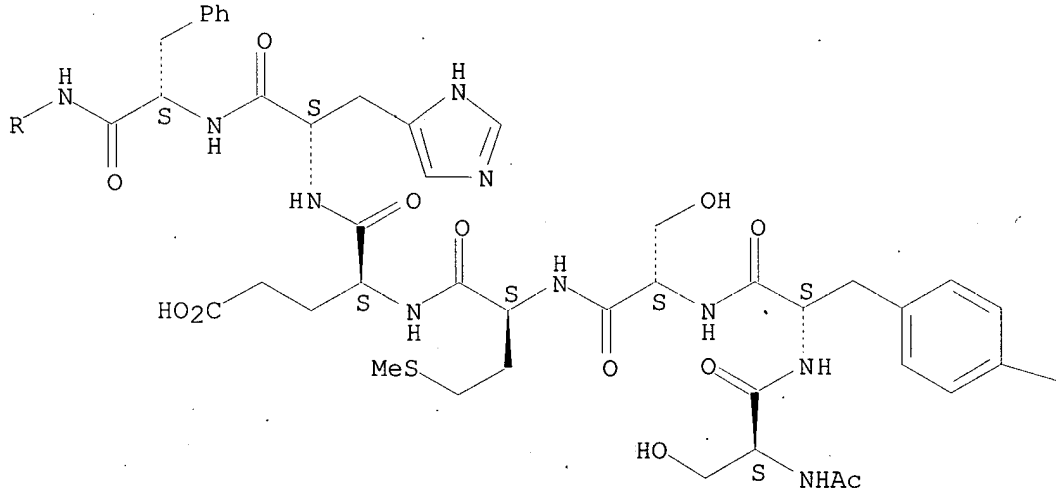

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OH

L7 ANSWER 10 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:577926 CAPLUS
DOCUMENT NUMBER: 127:316885
TITLE: Deciphering posttranslational processing events in the pituitary of a neopterygian fish: cloning of a gar proopiomelanocortin cDNA
AUTHOR(S): Dores, Robert M.; Smith, Tana R.; Rubin, David A.; Danielson, Phillip; Marra, Luciano E.; Youson, John H.
CORPORATE SOURCE: Department Biological Sciences, University Denver, Denver, CO, 80208, USA
SOURCE: General and Comparative Endocrinology (1997), 107(3), 401-413
CODEN: GCENA5; ISSN: 0016-6480
PUBLISHER: Academic
DOCUMENT TYPE: Journal
LANGUAGE: English

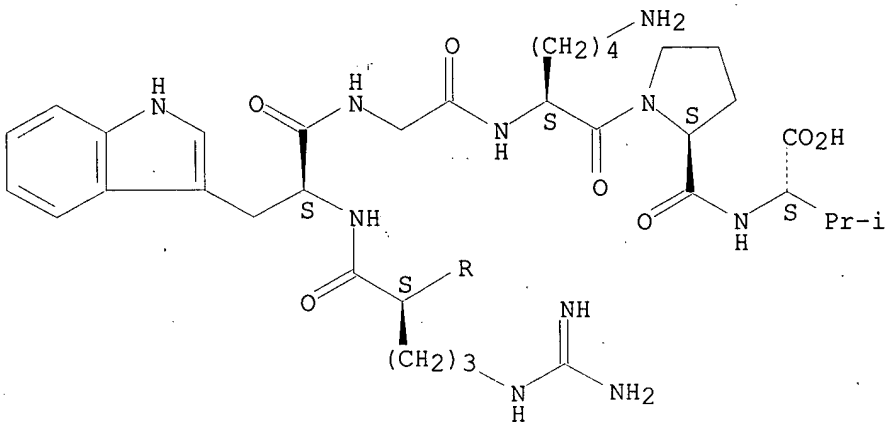
AB A cDNA that codes for the polypeptide hormone precursor proopiomelanocortin (POMC) was cloned and sequenced from a gar (Lepisosteus osseus) pituitary cDNA library. The gar POMC cDNA is 1237 bp and contains a 780-bp open reading frame. The deduced amino acid sequence for gar POMC is 259 amino acids in length. The general organization of gar POMC is very similar to that of other gnathostome POMC sequences. The .beta.-endorphin sequence had 91% sequence identity with sockeye A .beta.-endorphin and 71% sequence identity with Xenopus laevis .beta.-endorphin. Three MSH core sequences [HFR(W)] were detected. The gar .alpha.-MSH sequence was identical to the .alpha.-MSH sequence in rat POMC. The gar .beta.-MSH sequence had 77% sequence identity with tetrapod forms of .beta.-MSH. The .gamma.-MSH region of gar POMC only had 26% primary sequence identity with tetrapod .gamma.-MSH sequences. Gar .gamma.-MSH had an incomplete MSH core sequence (HRF), an apparent internal deletion of five amino acids, and lacked flanking paired basic amino acids essential for proteolytic cleavage. The apparent degenerate nature of gar .gamma.-MSH is discussed in light of the absence of this sequence in salmonid fish.

IT **22006-64-0**, .alpha.1-13-Corticotropin
RL: PRP (Properties)
(amino acid sequence; deciphering posttranslational processing events and cloning of a gar proopiomelanocortin cDNA)
RN 22006-64-0 CAPLUS
CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

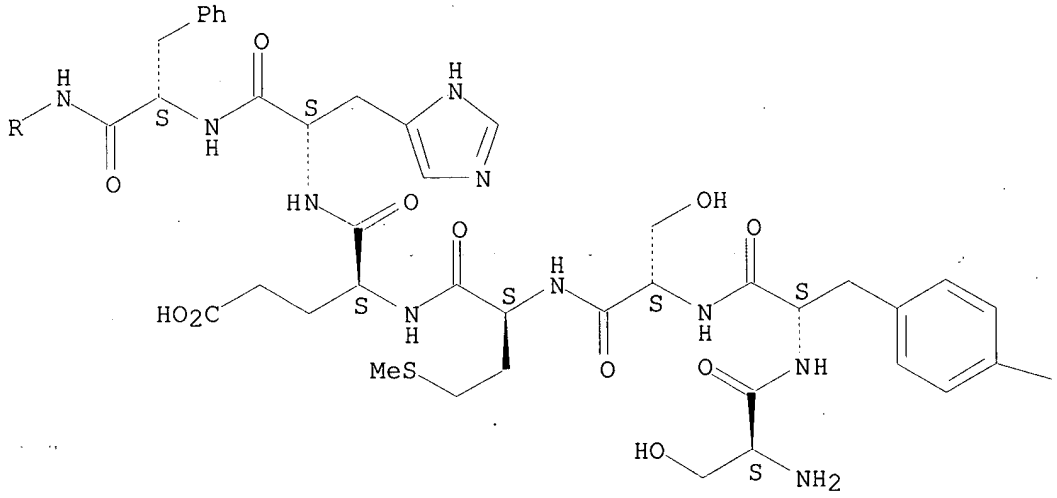
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



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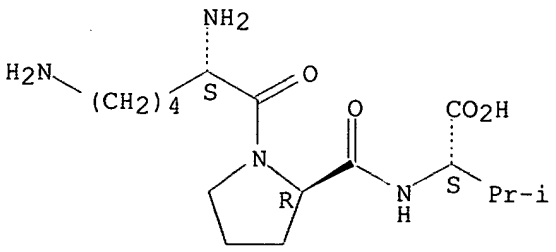
L7 ANSWER 11 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:572954 CAPLUS
DOCUMENT NUMBER: 127:261514
TITLE: Involvement of interleukin-1.beta., nerve growth factor and prostaglandin E2 in endotoxin-induced localized inflammatory hyperalgesia
AUTHOR(S): Safieh-Garabedian, Bared; Kanaan, Salim A.; Haddad, John J.; Jaoude, Pamela Abou; Jabbur, Suhayl J.; Saade, Nayef E.
CORPORATE SOURCE: Department of Biology, Faculty of Arts and Sciences, American University of Beirut, Beirut, Lebanon
SOURCE: British Journal of Pharmacology (1997), 121(8), 1619-1626
CODEN: BJPCBM; ISSN: 0007-1188
PUBLISHER: Stockton
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Intraplantar endotoxin (ET) injection (1.25 .mu.g) into the hind paw of rats resulted in a localized inflammatory hyperalgesia, as assessed by paw pressure (PP), paw immersion (PI), tail flick (TF) and hot plate (HP) tests. ET injection resulted in a significant elevation in the levels of interleukin-1.beta. (IL-1.beta.) and nerve growth factor (NGF) in the injected foot as compared with the non-injected foot. This increase was attenuated by i.p. injections of dexamethasone (200 and 400 .mu.g kg-1) and to a lesser extent by indomethacin (2 and 8 mg kg-1). The tripeptide Lys-D-Pro-Val, which is known to antagonize IL-1.beta. and prostaglandin E2 (PGE2) reversed mech. hyperalgesia, as assessed by the PP test, and reduced significantly thermal hyperalgesia, as assessed by the HP and TF tests. IL-1ra reversed both mech. (PP) and thermal (PI) nociceptive thresholds tested on the injected leg and significantly reduced thermal hyperalgesia, as assessed by the HP and TF tests. A sheep, anti-mouse NGF antiserum reversed mech. hyperalgesia (PP test) but had little or no effect on thermal hyperalgesia (PI, HP and TF tests). Our results indicate the importance of IL-1.beta., NGF and prostaglandin E2 (PGE2) in the development of ET induced hyperalgesia and the possible existence of different mechanisms underlying thermal and mech. as well as central and peripheral hyperalgesia.

IT **125905-17-1**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(tripeptide Lys-D-Pro-Val, known IL-1.beta. and PGE2 antagonist, reversed endotoxin-induced mech. hyperalgesia)
RN 125905-17-1 CAPLUS
CN L-Valine, L-lysyl-D-prolyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 12 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:244274 CAPLUS
DOCUMENT NUMBER: 126:224281

TITLE: cDNAs for the plant panallergen co-factor-independent phosphoglycerate mutase and identification of diagnostic and therapeutically useful epitopes
INVENTOR(S): Ferreira, Fatima; Richter, Klaus; Engel, Edwin; Ebner, Christof; Jilek, Alexander; Rheinberger, Hans-Joerg; Kraft, Dietrich; Breitenbach, Michael
PATENT ASSIGNEE(S): Biomay Produktions- Und Handelsgesellschaft Mbh, Austria; Ferreira, Fatima; Richter, Klaus; Engel, Edwin; Ebner, Christof; Jilek, Alexander; Rheinberger, Hans-Joerg; Kraft, Dietrich; Breitenbach, Michael
SOURCE: PCT Int. Appl., 159 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9705258	A2	19970213	WO 1996-AT141	19960802
WO 9705258	A3	19970327		
W: AU, CA, JP, NO, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AT 9501320	A	19961015	AT 1995-1320	19950802
AT 402505	B	19970625		
AU 9666059	A1	19970226	AU 1996-66059	19960802

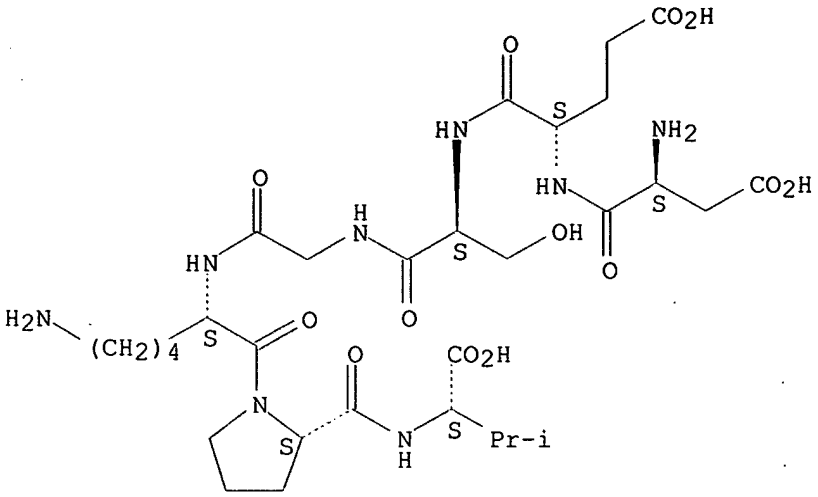
PRIORITY APPLN. INFO.: AT 1995-1320 19950802
WO 1996-AT141 19960802

AB CDNAs for the pollen panallergen co-factor-independent phosphoglycerate mutase (E.C. 5.4.2.1.) of birch, mugwort and timothy grass pollen are cloned and characterized. This sequence of the allergen is highly conserved in all plants, but not in animals. The amino acid sequence and the most important B and T cell epitopes of the mol. are derived and demonstrated. The allergen was manufd. in E. coli and bound the IgE serum of patients who are allergic to tree, grass and weed pollens and various foodstuffs. A monoclonal antibody (BIP 3) specifically binds to this protein from all plants tested. The significance of the co-factor-independent phosphoglycerate mutase (E.C. 5.4.2.1.) derives from the fact that it results in the cross-sensitization of patients. The protein and peptide fragments can be used in diagnostic and therapeutic methods based, for example, on antigen -antibody interaction, mediator release or T-cell reactivity.

IT **187816-27-9**
RL: ADV (Adverse effect, including toxicity); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(B-cell epitope of mugwort pollen phosphoglycerate mutase isoenzyme Art17; cDNAs for plant panallergen co-factor-independent phosphoglycerate mutase and identification of diagnostic and therapeutically useful epitopes)
RN 187816-27-9 CAPLUS
CN L-Valine, L-.alpha.-aspartyl-L-.alpha.-glutamyl-L-serylglycyl-L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

SEQ 1 DESGKPV

Absolute stereochemistry.



L7 ANSWER 13 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:193328 CAPLUS
DOCUMENT NUMBER: 126:272459
TITLE: Characterization of D117A and H260A mutations in the melanocortin 1 receptor
AUTHOR(S): Schioeth, Helgi B.; Muceniece, Ruta; Szardenings, Michael; Prusis, Peteris; Lindeberg, Gunnar; Sharma, Shubh D.; Hruby, Victor J.; Wikberg, Jarl E. S.
CORPORATE SOURCE: Dep. Pharmaceutical Pharmacology, Uppsala Univ., Uppsala, Swed.
SOURCE: Molecular and Cellular Endocrinology (1997), 126(2), 213-219
CODEN: MCEND6; ISSN: 0303-7207
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Recent site directed mutagenesis studied on the melanocortin 1 (MC1) receptor have indicated the importance of D117 and H260 amino acid residues for the binding of .alpha.-MSH. Here, the authors report the testing of 12 cyclic and linear MSH peptides on the D117A and H260A mutant receptors. Moreover, the authors constructed a double mutant which displayed a major loss in affinity for [Nle4,D-Phe7].alpha.-MSH. New data of His6 and Phe7 substituted MSH peptides are compared with previous results and the hypothesis of putative interactions of D117 and H260 with single amino acids in the MSH peptide. The conclusions are that the D117A and the H260A mutations may cause conformational changes in the receptor which can not be linked to any specific amino acid in the MSH-peptides.

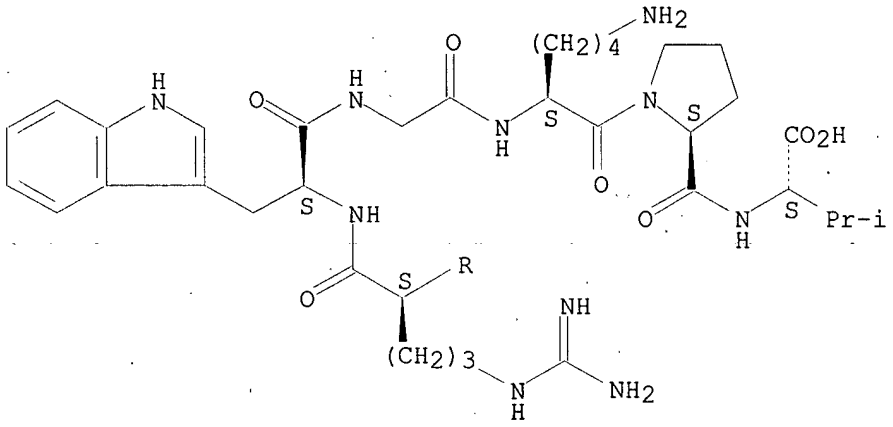
IT **188981-61-5 188981-65-9 188981-66-0**
188981-67-1
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(.alpha.-MSH analog binding and characterization of D117A and H260A mutations in melanocortin 1 receptor)

RN 188981-61-5 CAPLUS
CN .alpha.1-13-Corticotropin, 4-L-norleucine-7-D-phenylalanine- (9CI) (CA INDEX NAME)

SEQ 1 SYSXEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



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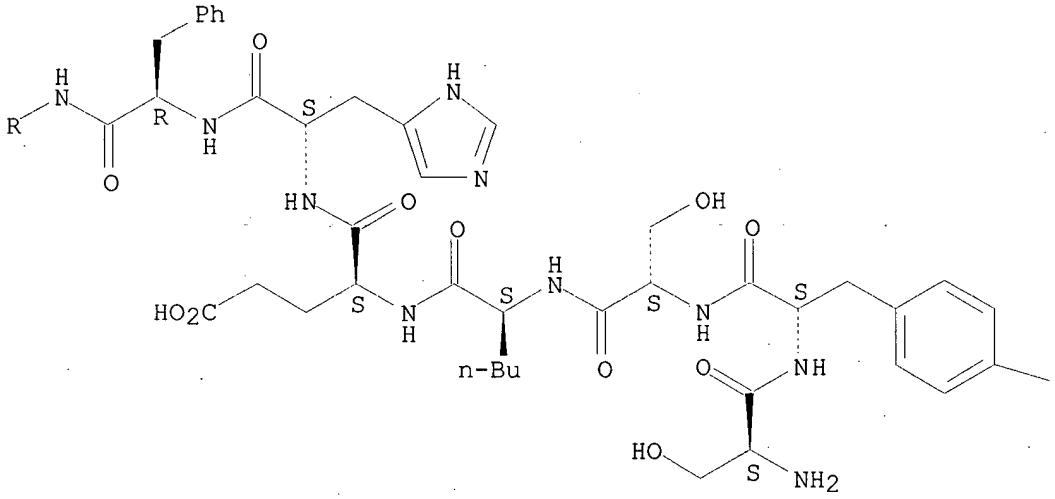

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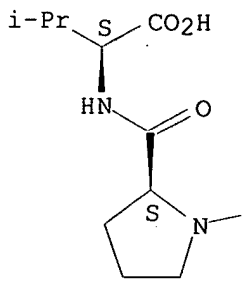
OH

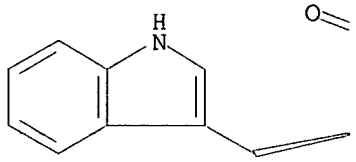
RN 188981-65-9 CAPLUS
CN L-Valine, L-seryl-L-tyrosyl-L-seryl-L-cysteinyl-L-.alpha.-glutamyl-L-histidyl-D-phenylalanyl-L-arginyl-L-tryptophyl-L-cysteinyl-L-lysyl-L-prolyl-, cyclic (4.fwdarw.10)-disulfide (9CI) (CA INDEX NAME)

SEQ 1 SYSCEHFRWC KPV

Absolute stereochemistry.

PAGE 1-A





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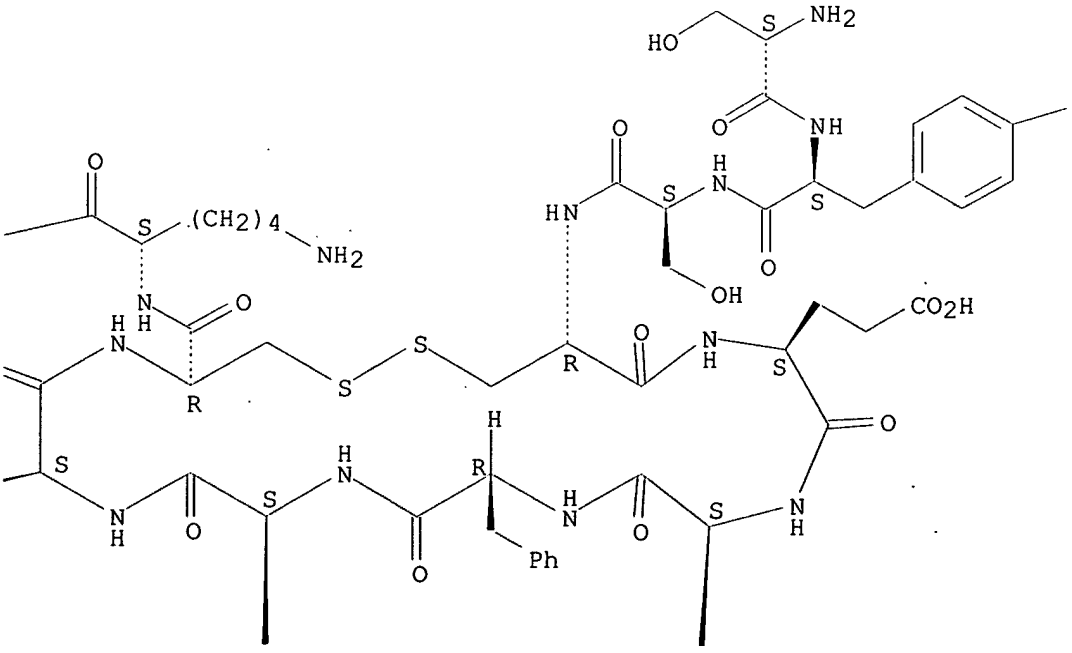

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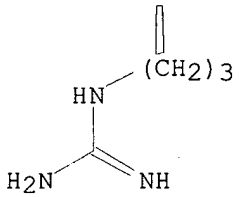
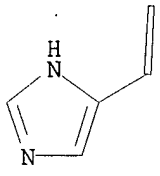


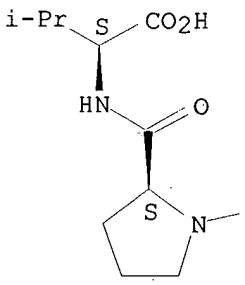


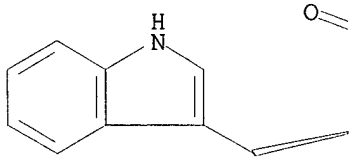
RN 188981-66-0 CAPLUS
CN L-Valine, L-seryl-L-tyrosyl-L-seryl-L-cysteinyl-L-.alpha.-glutamyl-L-histidyl-L-phenylalanyl-L-arginyl-L-tryptophyl-L-cysteinyl-L-lysyl-L-prolyl-, cyclic (4.fwdarw.10)-disulfide (9CI) (CA INDEX NAME)

SEQ 1 SYSCEHFRWC KPV

Absolute stereochemistry.

PAGE 1-A





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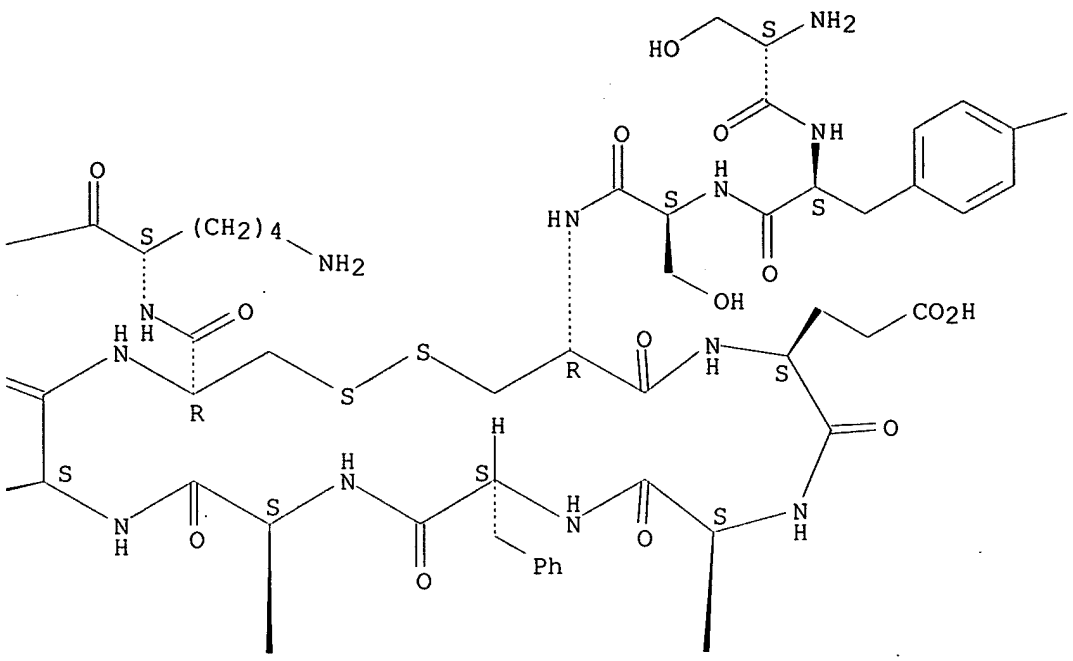

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OH

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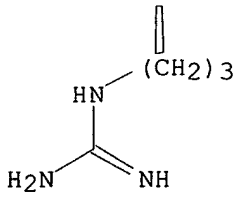
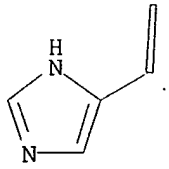


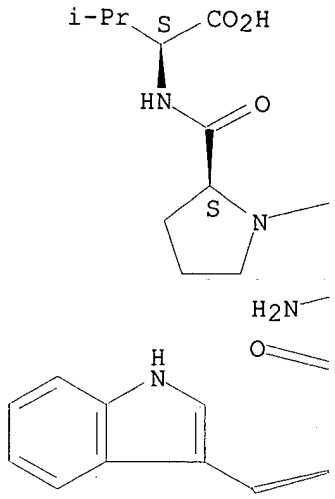


RN 188981-67-1 CAPLUS
CN L-Valine, L-cysteinyl-L-.alpha.-glutamyl-L-histidyl-D-phenylalanyl-L-arginyl-L-tryptophyl-L-cysteinyl-L-lysyl-L-prolyl-, cyclic (1.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

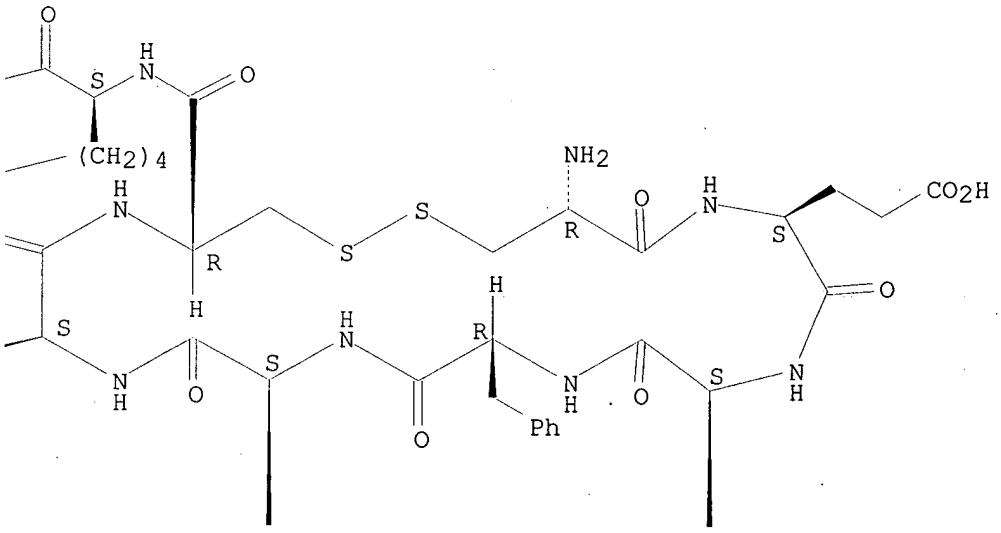
SEQ 1 CEHFRWCKPV

Absolute stereochemistry.

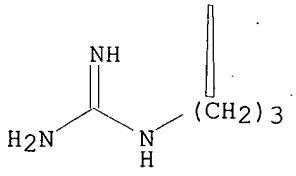
PAGE 1-A

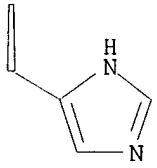


PAGE 1-B



PAGE 2-B





L7 ANSWER 14 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:180954 CAPLUS
DOCUMENT NUMBER: 126:176877
TITLE: .alpha.-Melanocyte stimulating hormone derivatives for the stimulation of hair growth or prevention of hair loss
INVENTOR(S): Mahe, Yann
PATENT ASSIGNEE(S): Oreal S. A., Fr.
SOURCE: Fr. Demande, 16 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2733421	A1	19961031	FR 1995-5158	19950428
FR 2733421	B1	19970606		
EP 759292	A1	19970226	EP 1996-400653	19960327
EP 759292	B1	19970326		
R: DE, ES, FR, GB, IT				
ES 2102921	T3	19970801	ES 1996-400653	19960327
JP 08301729	A2	19961119	JP 1996-108203	19960426
JP 2880125	B2	19990405		
US 5739111	A	19980414	US 1996-638774	19960429
US 6001812	A	19991214	US 1998-12233	19980123

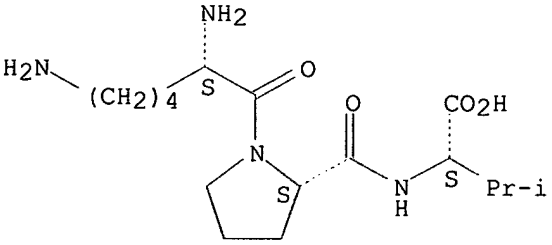
PRIORITY APPLN. INFO.: FR 1995-5158 19950428
US 1996-638774 19960429

AB .alpha.-MSH derivs., such as peptides contg. Lys-Pro-Val, are useful for the stimulation of hair growth or prevention of hair loss. A hair lotion contained acetyl-Lys-Pro-Val-NH2 12.5x10-6, 2,4-diaminopyrimidine-3-oxide 0.75, 95.degree. ethanol 30, perfume q.s., colors q.s., and water q.s. 100 g.

IT **67727-97-3**, Lys-Pro-Val
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(.alpha.-MSH derivs. for stimulation of hair growth or prevention of hair loss)

RN 67727-97-3 CAPLUS
CN L-Valine, L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 15 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:166020 CAPLUS
DOCUMENT NUMBER: 126:258473
TITLE: Synthesis and antinociceptive activity of peptides related to interleukin-1.beta.193-195 Lys-Pro-Thr
AUTHOR(S): Caliendo, G.; Greco, G.; Grieco, P.; Perissutti, E.; Santagada, V.; Ialenti, A.; Maffia, P.; Albrizio, S.;

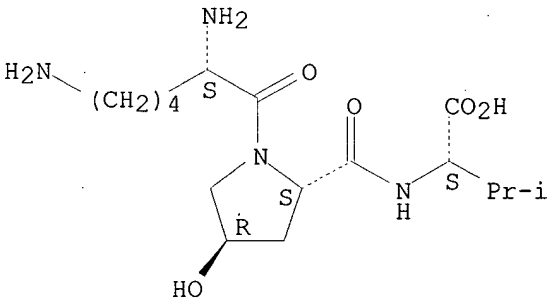
Santini, A.
CORPORATE SOURCE: Dipartimento Chimica Farmaceutica Tossicologica, Universita Napoli "Federico II", Naples, 80131, Italy
SOURCE: Biopolymers (1997), Volume Date 1996, 40(5), 479-484
CODEN: BIPMAA; ISSN: 0006-3525
PUBLISHER: Wiley
DOCUMENT TYPE: Journal
LANGUAGE: English

AB To obtain information about the structure-activity relationships of analgesic peptides, the authors modified the previously reported tripeptide, H-Lys-Pro-Thr-OH. The proline part in H-Lys-Pro-Thr-OH was replaced with various analogs of unconventional amino acids {(3aS,7aS)-octahydroindole-2-carboxylic acid (Oic), (S,S,S)-2-azabicyclo[3.3.0]octane-3-carboxylic acid (Aoc), D-Aoc, and (2S,4R)-hydroxyproline (Hyp)} with varying lipophilic, steric, and conformational properties, and alternatively with Lys and Orn in the lysine part. Moreover, the threonine part was changed to various natural amino acids (Ser, Thr, Val, Leu). All the compds. were screened in vivo for their analgesic effects in the mouse writhing test. H-Orn-Hyp-Val-OH, the most active compd. within the series, showed an ED50 value of 10 mg/kg, which is comparable with the ED50 values exhibited by indomethacin (4.1 mg/kg) and the dipeptide H-Lys-D-Pro-OH (6.9 mg/kg), both used as ref. drugs.

IT **188835-39-4P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthesis and antinociceptive activity of peptides related to interleukin-1.beta.193-195 Lys-Pro-Thr in relation to structure)

RN 188835-39-4 CAPLUS
CN L-Valine, L-lysyl-(4R)-4-hydroxy-L-prolyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 16 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:185656 CAPLUS
DOCUMENT NUMBER: 124:221086
TITLE: Pro-opiomelanocortin-derived peptides induce IL-10 production in human monocytes
AUTHOR(S): Bhardwaj, Ranjit S.; Schwarz, Agatha; Becher, Eva; Mahnke, Karsten; Aragane, Yoshinori; Schwarz, Thomas; Luger, Thomas A.
CORPORATE SOURCE: Dep. Dermatology, Univ. Muenster, Muenster, D-48149, Germany
SOURCE: Journal of Immunology (1996), 156(7), 2517-21
CODEN: JOIMA3; ISSN: 0022-1767
PUBLISHER: American Association of Immunologists
DOCUMENT TYPE: Journal

LANGUAGE: English

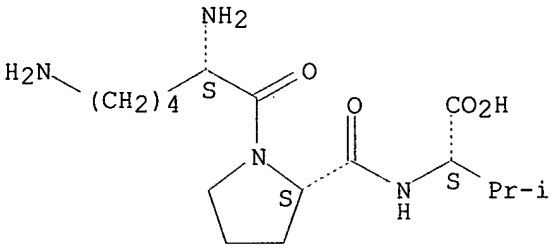
AB There is strong evidence for the existence of a neuroimmune axis which is regulated by a network of interacting cytokines and neuropeptides. Accordingly, pro-opiomelanocortin-derived peptide hormones such as melanocyte-stimulating hormones (MSH), ACTH, and .beta.-endorphin not only could be detected in many immunocompetent cells but also turned out to be potent immunomodulating and anti-inflammatory mediators, mainly through regulating cytokine prodn. Thus, it was investigated whether .alpha.-MSH, which is known to inhibit immune and inflammatory responses, would influence the prodn. of the cytokine synthesis inhibitor IL-10 by human PBMC. Stimulation of PBMC with .alpha.-MSH resulted in a significantly enhanced release of IL-10 protein. These data were confirmed by Northern blot anal., which demonstrated increased IL-10 mRNA expression induced by .alpha.-MSH. This effect of .alpha.-MSH was dose-dependent; max. IL-10 release and mRNA expression were obtained at a concn. of 10-13 M. There is also clear evidence that only the C-terminal tripeptide of .alpha.-MSH was required to enhance IL-10 prodn. In addn., .alpha.-MSH and its tripeptide strongly induced IL-10 in purified monocytes. In contrast, neither unstimulated nor activated T lymphocytes produced increased amts. of IL-10 in response to .alpha.-MSH. These findings indicate that pro-opiomelanocortin peptides such as .alpha.-MSH are able to up-regulate the prodn. of suppressor factors such as IL-10 in monocytes and thereby may contribute to immunosuppression.

IT **67727-97-3**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(pro-opiomelanocortin-derived peptides induce IL-10 prodn. in human monocytes)

RN 67727-97-3 CAPLUS

CN L-Valine, L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 17 OF 79 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1995:970915 CAPLUS

DOCUMENT NUMBER: 124:111191

TITLE: An improved imaging agent for malignant melanoma, based on [Nle4, D-Phe7].alpha.-melanocyte stimulating hormone

AUTHOR(S): Bard, D. R.

CORPORATE SOURCE: Strangeways Research Laboratory, Cambridge, CB1 4RN, UK

SOURCE: Nuclear Medicine Communications (1995), 16(10), 860-6
CODEN: NMCODC; ISSN: 0143-3636

PUBLISHER: Chapman & Hall

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Two compds. have been synthesized based on [Nle4,D-Phe7].alpha.-MSH (NDP-MSH) in which either one or two peptide sequences were covalently linked through their N'-termini to a single mol. of diethylenetriamine pentaacetic acid (DTPA). These two compds. (monoNDP-MSH-DTPA and

bisNDP-MSH-DTPA, resp.) bound indium-111 (111In) stably and showed hormonal activity as great or greater than .alpha.-MSH. Both compds. were able to target 111In to Cloudman S91 melanomas in DBA2 mice. MonoNDP-MSH-DTPA gave the highest tumor:blood and tumor:tissue ratios and showed least unspecific radioactivity in the liver and kidney. Radioscintigraphy of mice showed good tumor localization of 111In with both compds., clear images being obtainable within 2 h of injection. Scans with monoNDP-MSH-DTPA showed some kidney and thyroid but no liver radioactivity, whereas bisNDP-MSH-DTPA gave extensive abdominal radioactivity, most of which was assocd. with the liver and kidneys. MonoNDP-MSH-DTPA was cleared from the tumor much less rapidly and gave more favorable tumor:blood ratios than other .alpha.-MSH derivs. previously investigated. It is concluded that monoNDP-MSH-DTPA offers promise as a melanoma imaging agent in man.

IT **173069-84-6**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(an improved imaging agent for malignant melanoma, based on [Nle4, D-Phe7].alpha.-MSH)

RN 173069-84-6 CAPLUS

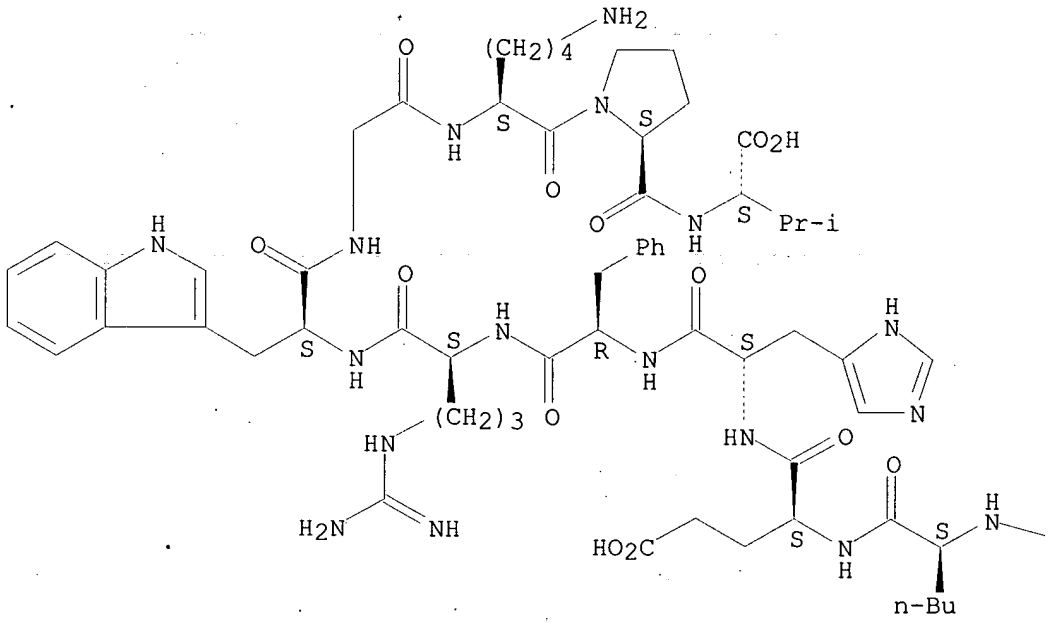
CN .alpha.1-13-Corticotropin, N-[N-[[[[bis(carboxymethyl)amino]methyl](carboxymethyl)amino]methyl]-N-(carboxymethyl)glycyl]-4-L-norleucine-7-D-phenylalanine- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

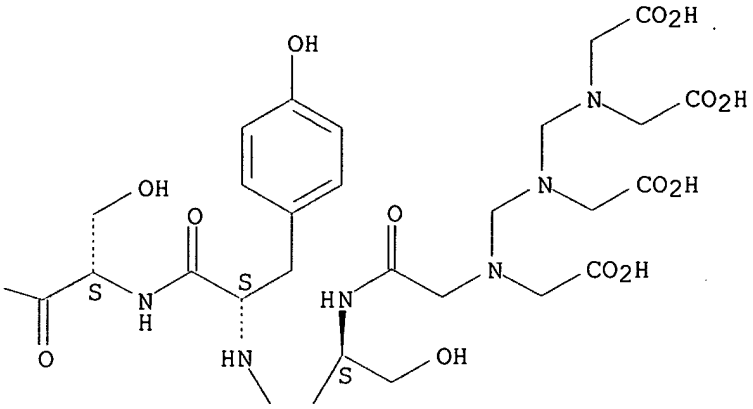
SEQ 1 GSYSXEHFRW GKPV

Absolute stereochemistry.

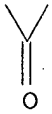
PAGE 1-A



PAGE 1-B



PAGE 2-B



L7 ANSWER 18 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:851029 CAPLUS
DOCUMENT NUMBER: 123:254518
TITLE: The immunosuppressive mini-domain of human lactoferrin
AUTHOR(S): Siemion, Ignacy Z.; Slon, Jacek; Wieczorek, Zbigniew
CORPORATE SOURCE: Institute Chem., Univ. Wroclaw, Wroclaw, Pol.
SOURCE: Journal of Peptide Science (1995), 1(5), 295-302
CODEN: JPSIEI; ISSN: 1075-2617
PUBLISHER: Wiley
DOCUMENT TYPE: Journal
LANGUAGE: English

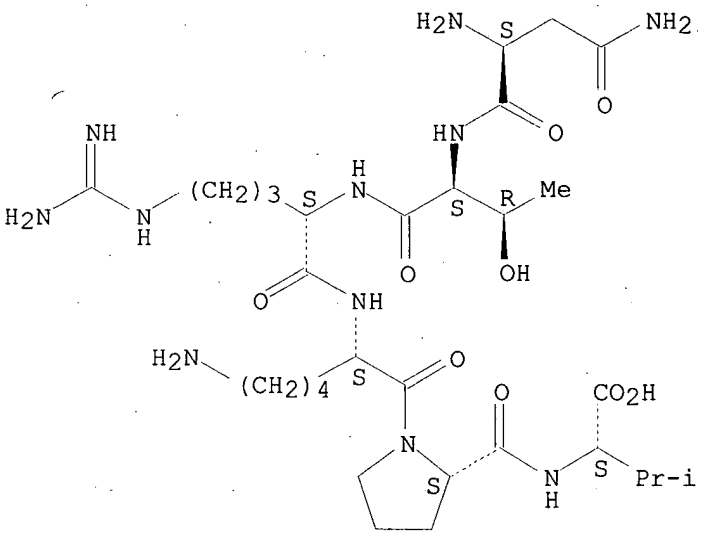
AB It has been found that the disulfide-bridged 231-245 pentadecapeptide loop of the lactoferrin (LF) N-lobe contains a region of immunosuppressive activity. The activity resides within a thymopentin-like sequence (Arg-Lys-Pro-Val-Asp) of the loop. Peptides related to the 575-589 loop of the LF C-lobe differ in their immunomodulatory activity from those related to the 231-245 loop. The authors ascribe this difference to the replacement of the Asp residue in the 231-245 loop by Thr in the 575-589 loop. Two other fragments of LF which were studied, 27-34 and 309-315, do not manifest any activity in the DTH test (cellular immune response), but, on testing in vivo, stimulate the humoral immune response. The 27-34 fragment is related to the bactericidal and immunostimulative region of LF identified by Bellamy et al. [1]. The results show that the LF mol. contains, not only the known immunostimulating mini-domain, but also a region endowed with immunosuppressive activity.

IT **169056-35-3 169056-39-7**
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(immunosuppressive mini-domain of human lactoferrin)

RN 169056-35-3 CAPLUS
CN L-Valine, N-[1-[N2-[N2-(N-L-asparaginyl-L-threonyl)-L-arginyl]-L-lysyl]-L-prolyl]- (9CI) (CA INDEX NAME)

SEQ 1 NTRKPV

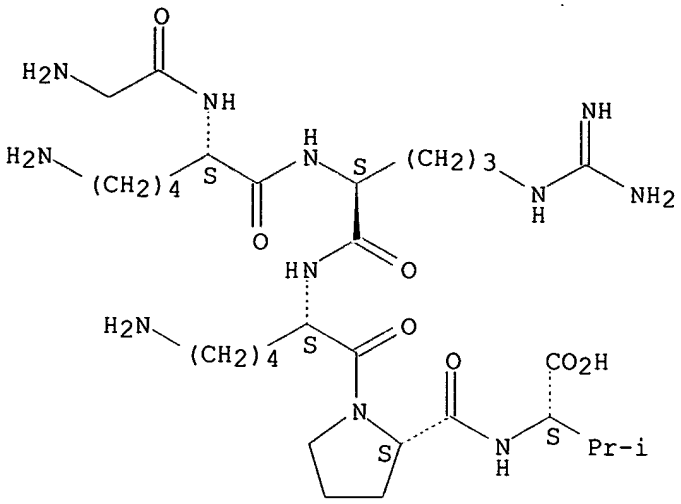
Absolute stereochemistry.



RN 169056-39-7 CAPLUS
CN L-Valine, N-[1-[N2-[N2-(N2-glycyl-L-lysyl)-L-arginyl]-L-lysyl]-L-prolyl]- (9CI) (CA INDEX NAME)

SEQ 1 GKRKPV

Absolute stereochemistry.



L7 ANSWER 19 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:505690 CAPLUS
DOCUMENT NUMBER: 122:256530
TITLE: Structural determinants of the melanocortin peptides required for activation of melanocortin-3 and melanocortin-4 receptors
AUTHOR(S): Miwa, Hiroto; Gantz, Ira; Konda, Yoshitaka; Shimoto, Yoshimasa; Yamada, Tadataka
CORPORATE SOURCE: Departments Internal Medicine, Surgery, Physiology, Univ. Michigan Medical Center, Ann Arbor, MI, USA
SOURCE: Journal of Pharmacology and Experimental Therapeutics (1995), 273(1), 367-72
CODEN: JPETAB; ISSN: 0022-3565
PUBLISHER: Williams & Wilkins
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The melanocortins are peptide products of proopiomelanocortin post-translational processing that, among other functions, are thought to influence cognition. Recently, the authors isolated genes encoding two human melanocortin receptors, the melanocortin-3 receptor (hMC3R) and the melanocortin-4 receptor (hMC4R), which are expressed primarily in brain. The authors undertook the present studies to examine the structural features of melanocortins that det. activation of these two receptors. For the studies the authors expressed the coding regions of the hMC3R and hMC4R genes in Hepa cells using the eukaryotic expression vector CMVneo and examd. the generation of intracellular cyclic 3',5'-adenosine monophosphate in response to stimulation with various melanocortins. The findings indicate that the core heptapeptide sequence common to most of the melanocortins (amino acids 4-10 of adrenocorticotropic hormone [ACTH]) is the primary determinant for activation of hMC3R but, in addn., tyrosine2 is necessary for maximal response. Activity of hMC4R is heavily dependent on proline12, but full activity also requires a contribution by tyrosine2. These findings may provide insight into the development of targeted ligands for the brain melanocortin receptors.

IT **10466-28-1**, .alpha.-Melanotropin, 13-L-valine- (pig)
22006-64-0, .alpha.-Melanotropin, N-deacetyl-13-L-valine- (pig)
151992-30-2
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(melanocortin structures for activation of melanocortin-3 and melanocortin-4 receptors)

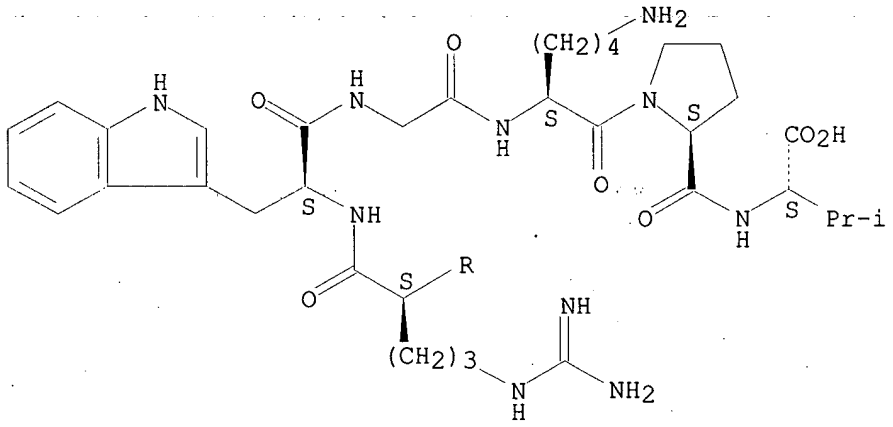
RN 10466-28-1 CAPLUS
CN .alpha.-Melanotropin (swine), 13-L-valine- (9CI) (CA INDEX NAME)

NTE modified

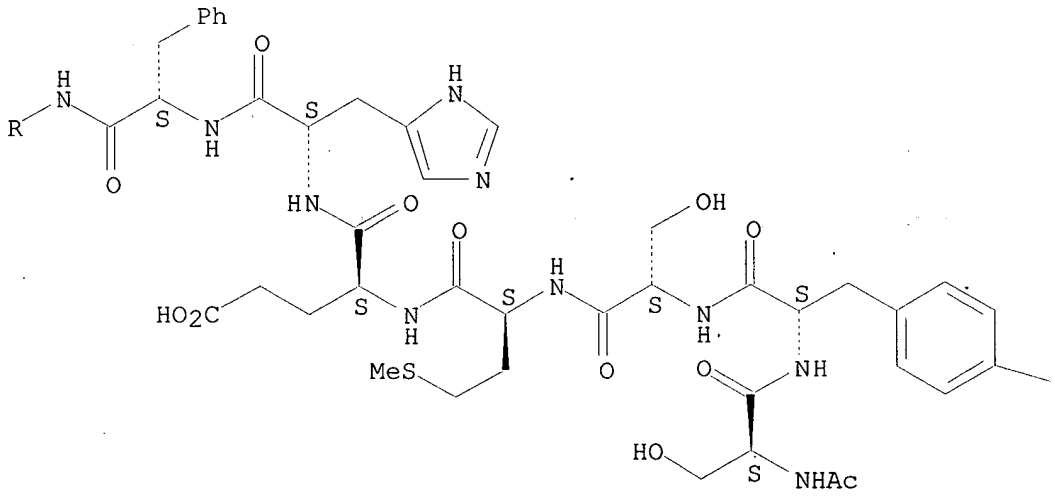
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PAGE 2-B

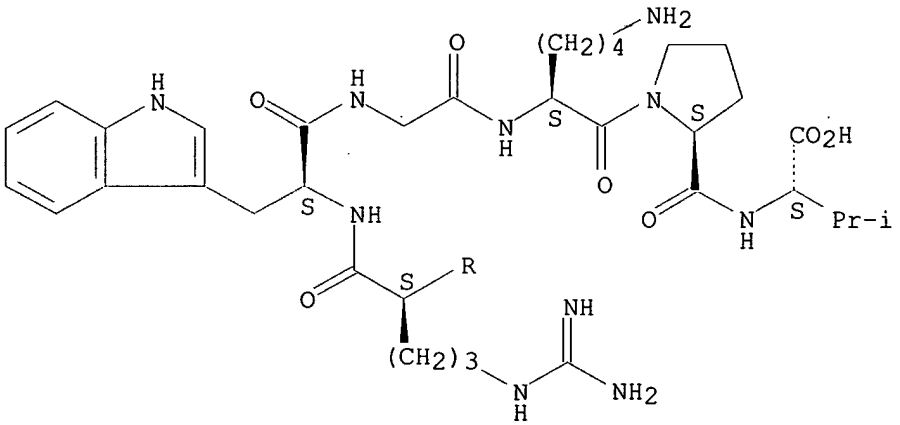
—OH

RN 22006-64-0 CAPLUS
CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

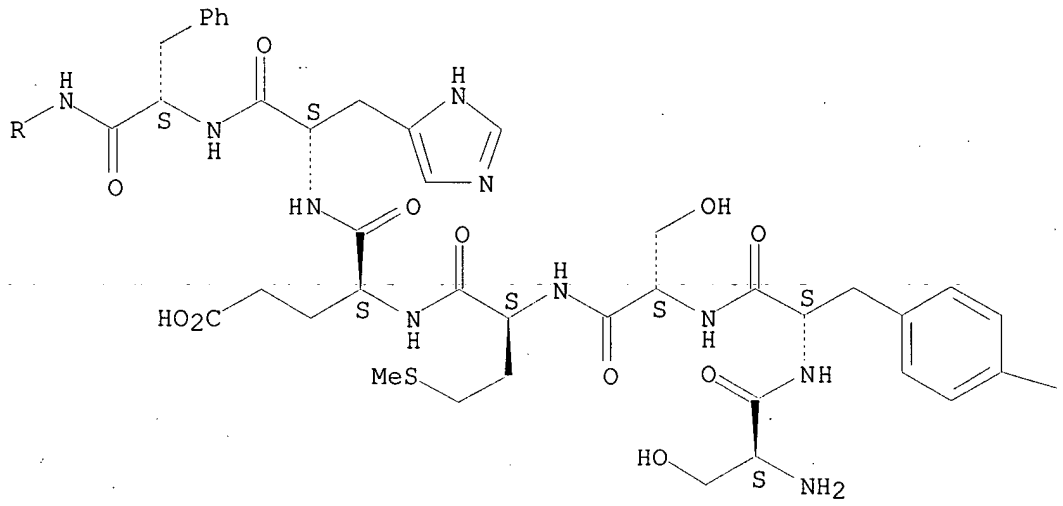
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

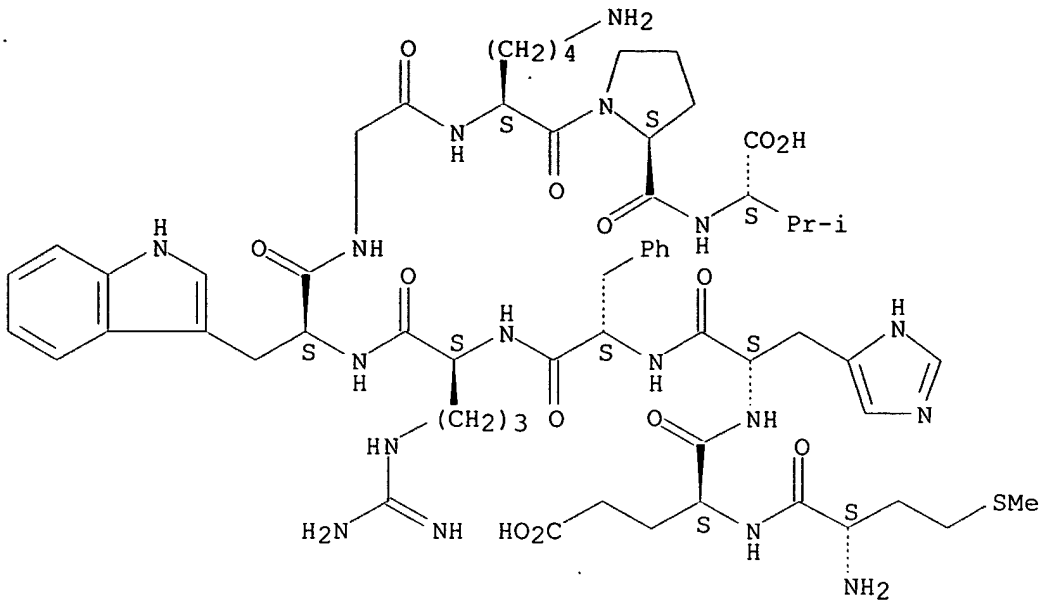


PAGE 2-B

RN 151992-30-2 CAPLUS
CN L-Valine, L-methionyl-L-.alpha.-glutamyl-L-histidyl-L-phenylalanyl-L-arginyl-L-tryptophylglycyl-L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

SEQ 1 MEHFRWGKPV

Absolute stereochemistry.

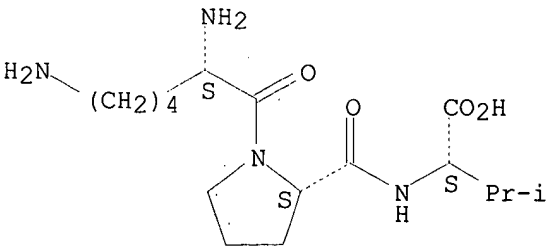


L7 ANSWER 20 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:481381 CAPLUS
DOCUMENT NUMBER: 122:230965
TITLE: Antipyretic activity of .alpha.-melanocyte stimulating hormone and related peptides
AUTHOR(S): Mitchell, Duncan; Goelst, Kathleen
CORPORATE SOURCE: Department Physiology, University the Witwatersrand Medical School, Johannesburg, S. Afr.
SOURCE: Integr. Cell. Aspects Auton. Funct. Proc. Int. Symp. (1994), Meeting Date 1993, 171-9. Editor(s): Pleschka, Klaus; Gerstberger, Ruediger. Libbey: Montrouge, Fr.
CODEN: 61DQAA
DOCUMENT TYPE: Conference
LANGUAGE: English

AB .alpha.-MSH is a strong contender for the role of endogenous antipyretic and also is a potential substrate for therapeutic antipyretics. The antipyretic activity of the hormone resides in its terminal (11-13) tripeptide Lys-Pro-Val. The tripeptide fragment Lys-Pro-Val is itself a potent antipyretic. The authors have explored the antipyretic activity of the enantiomer Lys-D-Pro-Val, and an analog, Lys-D-Pro-Thr, in rabbits given endotoxin 0.1 .mu.g/kg i.v. At i.v. doses at which Lys-Pro-Val is antipyretic, neither of the D-proline tripeptides has antipyretic activity, in spite of being more active biol. in other circumstances. At the same dose, neither tripeptide affects normal body temp. Whether the analog [D-Pro12] .alpha.-MSH also is devoid of antipyretic activity needs to be investigated.

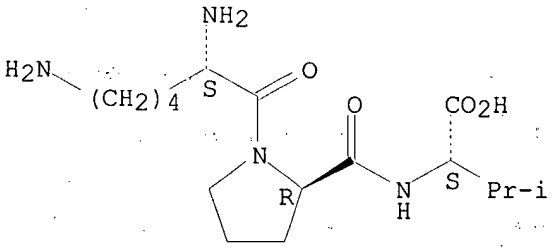
IT **67727-97-3**, Lys-Pro-Val **125905-17-1**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antipyretic activity of .alpha.-MSH and .alpha.-MSH tripeptide fragments and enantiomers)
RN 67727-97-3 CAPLUS
CN L-Valine, L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 125905-17-1 CAPLUS
CN L-Valine, L-lysyl-D-prolyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 21 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:296957 CAPLUS
DOCUMENT NUMBER: 122:72399
TITLE: Differential effects of melanocortin peptides on neural melanocortin receptors
AUTHOR(S): Adan, Roger A. H.; Cone, Roger D.; Burbach, J. Peter H.; Gispen, Willem Hendrik
CORPORATE SOURCE: Rudolf Magnus Institute for Neuroscience, Utrecht Univ., Utrecht, 3508 TA, Neth.
SOURCE: Molecular Pharmacology (1994), 46(6), 1182-90
CODEN: MOPMA3; ISSN: 0026-895X
PUBLISHER: Williams & Wilkins
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Melanocortins (MCs) have various physiol. actions on the brain. The recent cloning of neural MC receptors opened new avenues to study the effects of these neuropeptides on the nervous system. Here the authors investigated the structure-activity relationships (SARs) of peptides derived from adrenocorticotropic hormone (ACTH) with cloned MC3 and MC4 receptors in vitro and correlated the with central effects of MCs in vivo. Anal. of the effects of various MC peptides on cAMP accumulation in and binding to cells that expressed either the rat MC3 receptor or the human MC4 receptor demonstrated that ACTH-4-9-NH2 was the core sequence of ACTH able to activate these receptors. Furthermore, .gamma.-MSH displayed selectivity for the MC3 receptor, whereas [D-Phe7]ACTH-4-10 more efficiently activated the MC4 receptor than the MC3 receptor. The activities of MC fragments that lacked the three carboxyl-terminal amino acids (residues 11-13) of ACTH1-13 were much lower than that of .alpha.-MSH, for both receptors. Furthermore, the three amino-terminal amino acids (residues 1-3) of .alpha.-MSH were more important for full activation of the MC4 receptor, compared with the MC3 receptor. The SAR for the MC4 receptor resembled that for the induction of excessive grooming behavior by MC peptides. Therefore, the authors suggest that this behavioral response is mediated by MC4 receptors. The SAR for the MC3 receptor did not overlap with that for in vivo effects of MCs.

ORG2766, an ACTH-4-9 analog that is very potent in an active avoidance task, did not activate, antagonize, or bind to the MC3 and MC4 receptors. This suggests the presence of still other MC receptors, in addn. to the MC3 and MC4 receptors, in the brain. These data identify peptides with selectivity for either the MC3 receptor or the MC4 receptor, which may be used for development of novel MC receptor-specific ligands. Furthermore, this is the first report that discusses behavioral effects of MCs in light of data on cloned MC receptors.

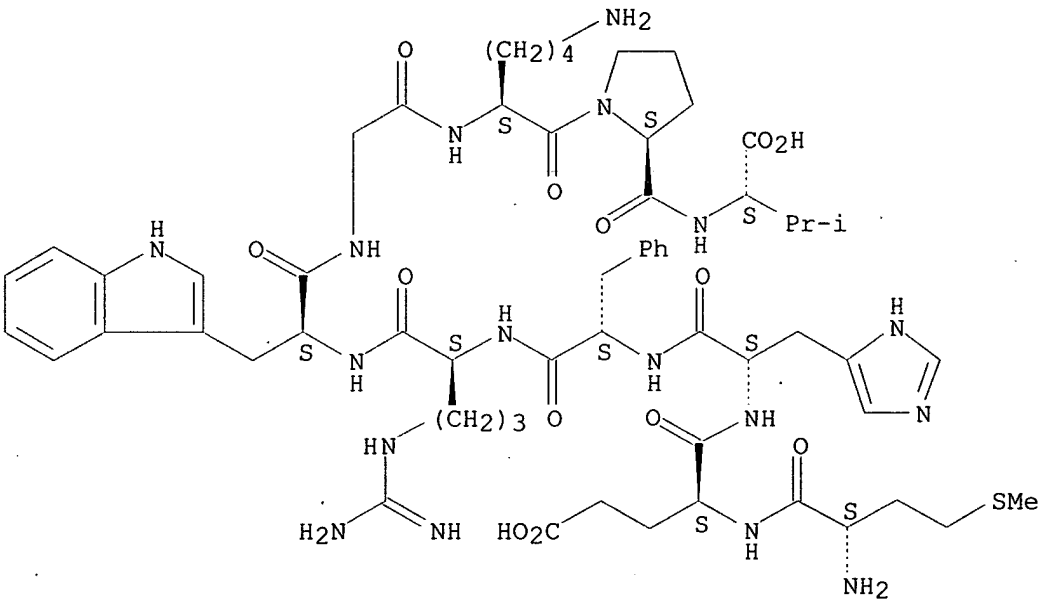
IT **151992-30-2**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(differential effects of melanocortin peptides on neural melanocortin receptors)

RN 151992-30-2 CAPLUS

CN L-Valine, L-methionyl-L-.alpha.-glutamyl-L-histidyl-L-phenylalanyl-L-arginyl-L-tryptophylglycyl-L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

SEQ 1 MEHFRWGKPV

Absolute stereochemistry.



L7 ANSWER 22 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1994:677121 CAPLUS
DOCUMENT NUMBER: 121:277121
TITLE: The effect of corticotropin-releasing factor and pro-opiomelanocortin-derived peptides on the phagocytosis of molluscan hemocytes
AUTHOR(S): Ottaviani, E.; Franchini, A.; Fontanili, P.
CORPORATE SOURCE: Department of Animal Biology, University of Modena, Modena, I-41100, Italy
SOURCE: Experientia (1994), 50(9), 857-9
CODEN: EXPEAM; ISSN: 0014-4754
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The effect of CRF and pro-opiomelanocortin (POMC)-derived peptides on

hemocyte phagocytosis in 2 mollusks, Planorbarius corneus and Viviparus ater, was studied. The peptides and related fragments examd. are those which have been shown to influence hemocyte motility in the 2 species. The results obtained revealed that the effects on phagocytosis are not directly correlated with previous findings on cell motility. Furthermore, the mode of action of an individual peptide could be species specific and dose dependent. The relationships between peptides, locomotion, and phagocytosis in these mollusks are discussed.

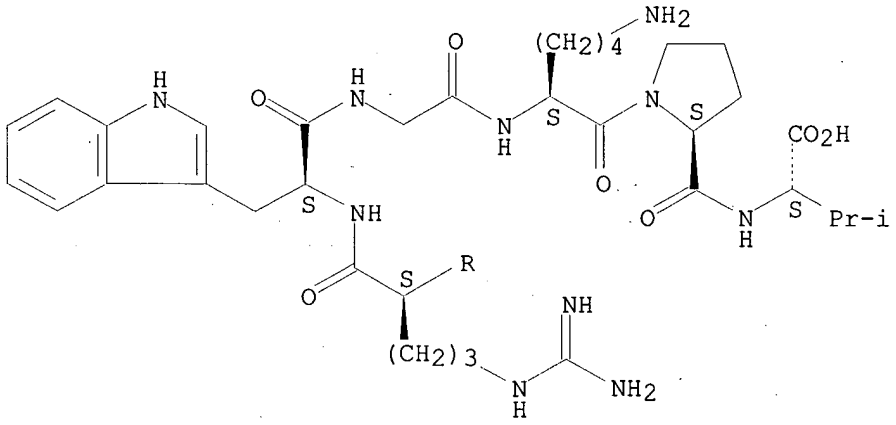
IT **22006-64-0**, ACTH 1-13
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(phagocytosis by hemocyte of mollusk response to CRF and pro-opiomelanocortin-derived peptides)

RN 22006-64-0 CAPLUS
CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

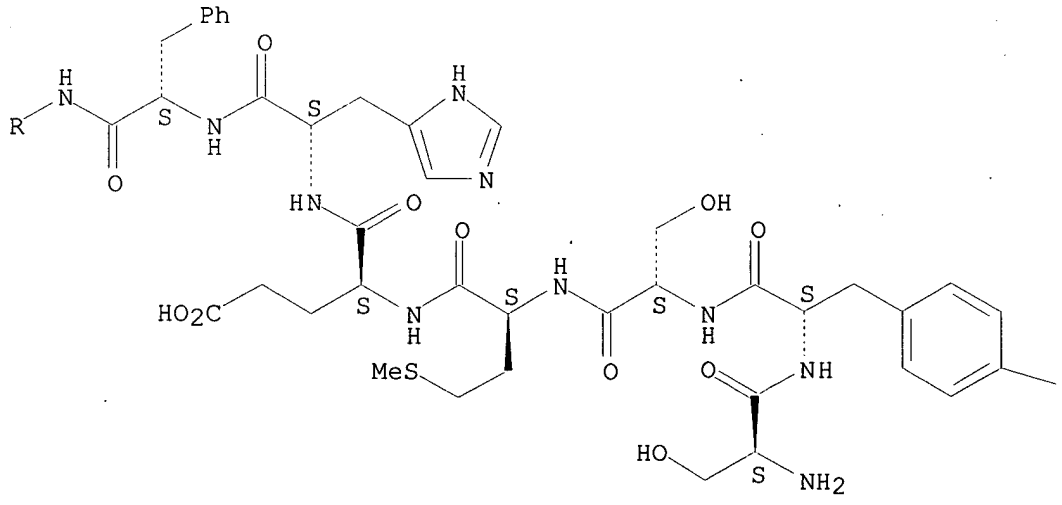
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



—OH

L7 ANSWER 23 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1994:528765 CAPLUS
DOCUMENT NUMBER: 121:128765
TITLE: Human tissue factor heavy chain and fragments and monoclonal antibodies and their therapeutic use
INVENTOR(S): Edgington, Thomas S.; Colman, Robert W.; Kappelmayer, Janos; Edmunds, L. Henry, Jr.; Bernabei, Alvise
PATENT ASSIGNEE(S): Scripps Research Institute, USA; University of Pennsylvania; Temple University of the Commonwealth Systems of Higher Education
SOURCE: PCT Int. Appl., 155 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9411029	A1	19940526	WO 1993-US11239	19931116
W: AU, CA, FI, JP, NO				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5437864	A	19950801	US 1992-977281	19921116
AU 9456715	A1	19940608	AU 1994-56715	19931116

PRIORITY APPLN. INFO.:
US 1992-977281 19921116
US 1987-33047 19870331
US 1987-67103 19870625
US 1988-165939 19880309
WO 1993-US11239 19931116

AB Human tissue factor is identified as a heterodimer of a light and a heavy chain and heavy chain binding site polypeptide analogs and monoclonal antibodies for use as anticoagulants, e.g. in extracorporeal circulation are also described. Heavy chain is manufd. by expression of a cloned cDNA. The protein was purified from human brain by solvent extn. and affinity chromatog. against immobilized factor VII/VIIa and the protein found to have a 47 kDa heavy chain and an 12.5 kDa light chain. N-terminal sequencing showed that the heavy chain had two different N-termini arising from the loss of two N-terminal amino acids; the small subunit was identified as .alpha.-globin. Polyclonal and monoclonal antibodies were raised against the heavy chain and used in its immunoaffinity purifn. of the factor and as coagulation inhibitors and

were found to be useful in the treatment of shock due to sepsis caused by Gram-neg. bacteria. Peptides derived from the heavy chain were also shown to inhibit factor VII/VIIa-dependent blood clotting. Expression of a gene for the heavy chain and bacterial, yeast, and animal cells is described.

IT **121357-13-9 121357-13-9D**, phospholipidated
RL: BIOL (Biological study)
(as inhibitor of tissue factor-dependent coagulation)

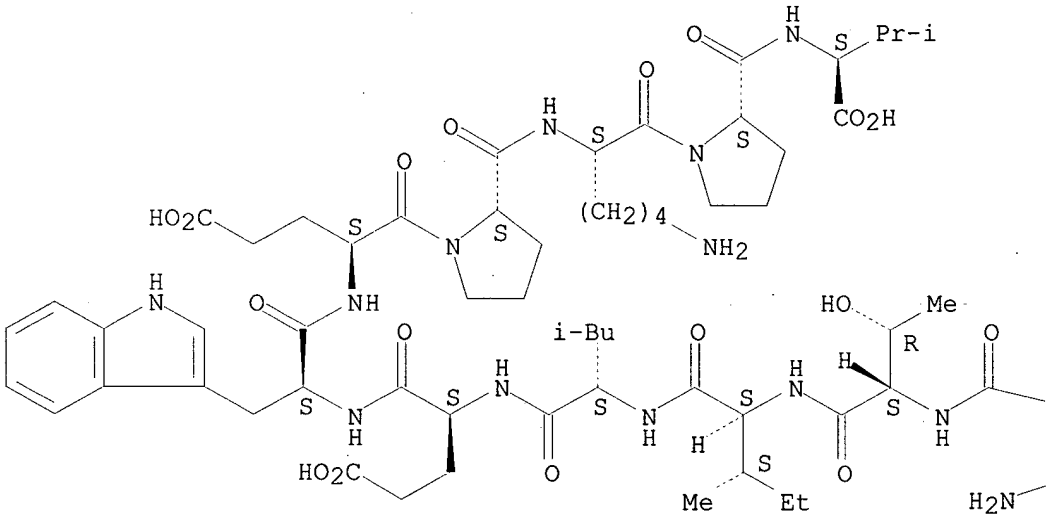
RN 121357-13-9 CAPLUS

CN L-Valine, L-serylglycyl-L-threonyl-L-threonyl-L-asparaginyl-L-threonyl-L-valyl-L-alanyl-L-alanyl-L-tyrosyl-L-asparaginyl-L-leucyl-L-threonyl-L-tryptophyl-L-lysyl-L-seryl-L-threonyl-L-asparaginyl-L-phenylalanyl-L-lysyl-L-threonyl-L-isoleucyl-L-leucyl-L-.alpha.-glutamyl-L-tryptophyl-L-.alpha.-glutamyl-L-prolyl-L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

SEQ 1 SGTTNTVAAY NLTWKSTNFK TILEWEPKPV

Absolute stereochemistry.

PAGE 1-A



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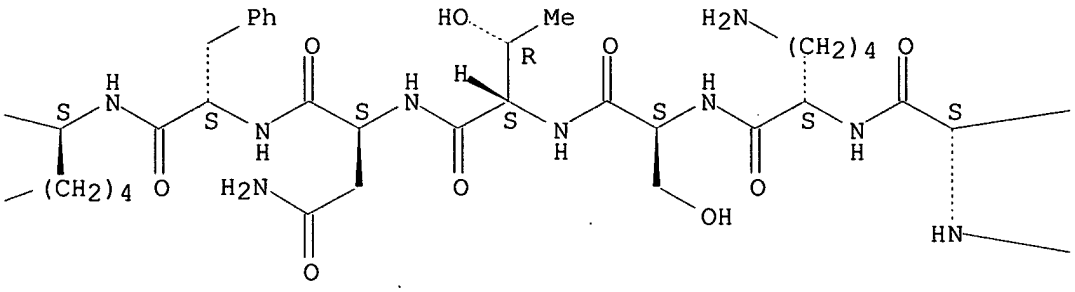
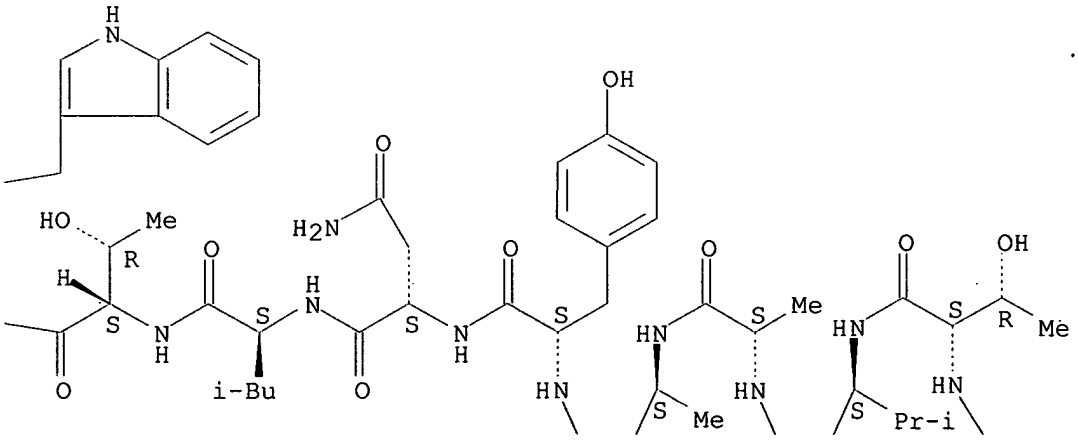


PAGE 1-C



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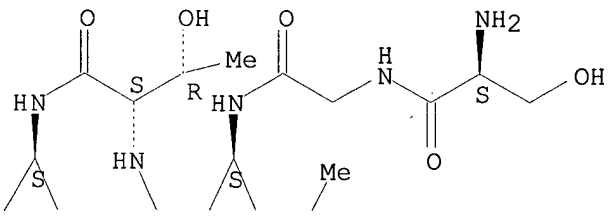

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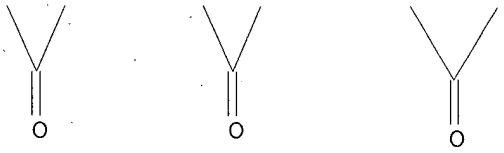

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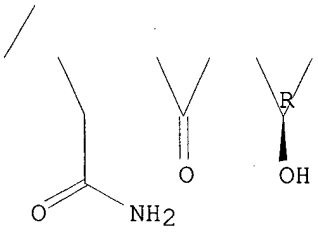
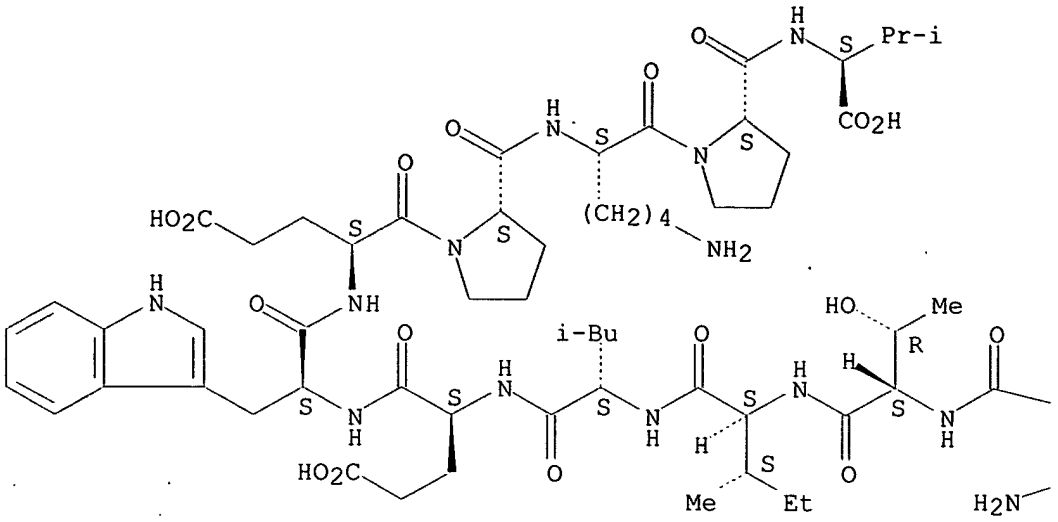


RN 121357-13-9 CAPLUS
CN L-Valine, L-serylglycyl-L-threonyl-L-threonyl-L-asparaginyl-L-threonyl-L-valyl-L-alanyl-L-alanyl-L-tyrosyl-L-asparaginyl-L-leucyl-L-threonyl-L-tryptophyl-L-lysyl-L-seryl-L-threonyl-L-asparaginyl-L-phenylalanyl-L-lysyl-L-threonyl-L-isoleucyl-L-leucyl-L-.alpha.-glutamyl-L-tryptophyl-L-.alpha.-glutamyl-L-prolyl-L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

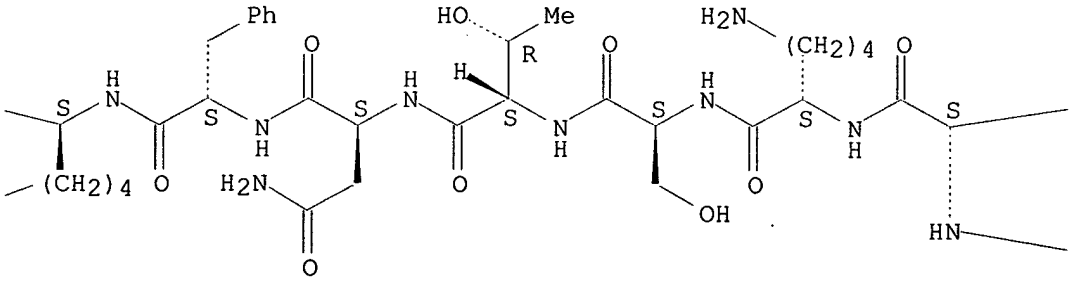
SEQ 1 SGTTNTVAAY NLTWKSTNFK TILEWEPKPV

Absolute stereochemistry.

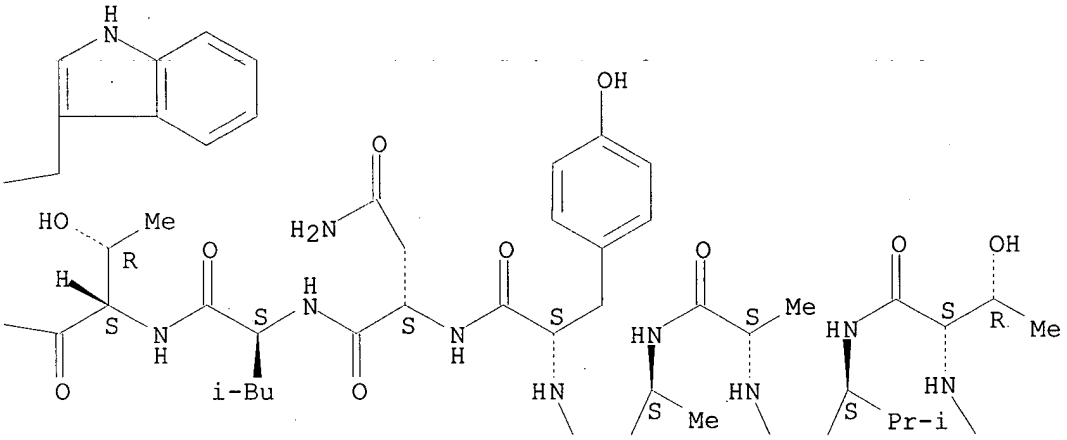
PAGE 1-A



PAGE 1-B



PAGE 1-C



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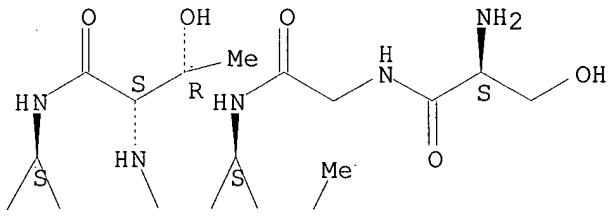

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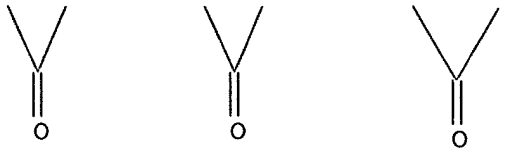

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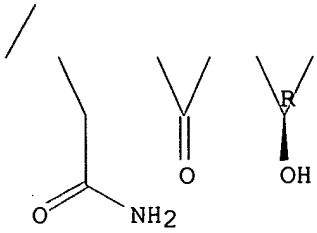
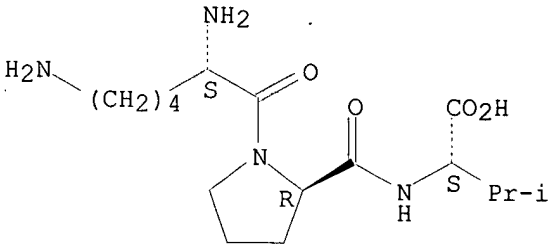


L7 ANSWER 24 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1994:449912 CAPLUS
DOCUMENT NUMBER: 121:49912
TITLE: Antinociceptive activity of peptides related to interleukin-1.beta.-(193-195), Lys-Pro-Thr
AUTHOR(S): Oluyomi, Ademola O.; Poole, Steven; Smith, Terrence W.; Hart, Stephen L.
CORPORATE SOURCE: Pharmacology Group, King's College, Manresa Road, London, SW3 6LX, UK
SOURCE: Eur. J. Pharmacol. (1994), 258(1-2), 131-8
CODEN: EJPHAZ; ISSN: 0014-2999
DOCUMENT TYPE: Journal
LANGUAGE: English

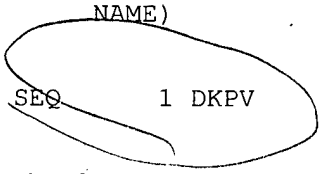
AB A series of closely related peptide analogs of Lys-Pro-Thr [interleukin-1.beta.-(193-195)] have been investigated in 2 models of antinociception in mice (acetic acid-induced abdominal constrictions and formalin tests) and compared with morphine, aspirin, and indomethacin. Formalin-induced nociceptive responses in the mouse showed early (0-5 min) and late (15-30 min) phases of peak activity. Lys-D-Pro, Lys-D-Pro-Thr, Lys-D-Pro-Arg, Lys-D-Pro-Val, morphine, and aspirin were antinociceptive in both phases after i.p. and oral (p.o.) administrations. Lys-D-Pro-Leu inhibited the early phase response only after i.p. injection. Lys-D-Pro-Val-NH2, Lys-D-Pro-Gln, Lys-D-Pro-Tyr, Lys-D-Pro-Asn, Asp-Lys-D-Pro-Val and indomethacin were active only against the late phase (ED50 values of 64, 32, 44, 94, 67, and 25 mg/kg i.p., resp.). Several of the peptides showed good bio-availability, e.g. Lys-D-Pro-Asn (ED: 10 mg/kg i.p.; 11.4 mg/kg p.o.) in the abdominal constrictions test, where 2 modes of action were apparent, non-opioid and opioid; non-opioid (naloxone-insensitive antinociception) mechanisms were illustrated by Lys-D-Pro-Thr and Lys-D-Pro-Asn; opioid (naloxone-sensitive antinociception) mechanisms by Lys-D-Pro-Val and Lys-D-Pro-Leu. These data identify orally active antinociceptive peptides in both antinociceptive tests with varied relative potency profiles to morphine, indomethacin, and aspirin in the mouse formalin test.

IT **125905-17-1 156127-68-3**
RL: BIOL (Biological study)
(antinociceptive activity of interleukin-1.beta.-related)
RN 125905-17-1 CAPLUS
CN L-Valine, L-lysyl-D-prolyl- (9CI) (CA INDEX NAME)

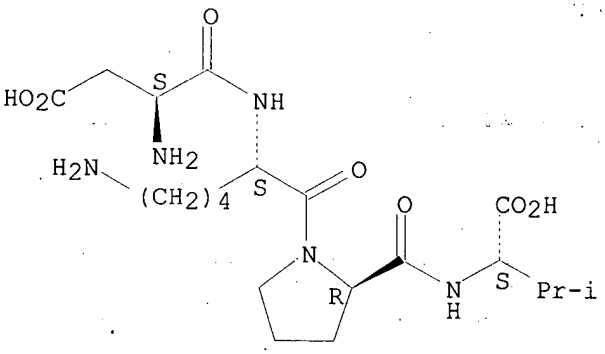
Absolute stereochemistry.



RN 156127-68-3 CAPLUS
CN L-Valine, N-[1-(N2-L-.alpha.-aspartyl-L-lysyl)-D-prolyl]- (9CI) (CA INDEX NAME)



Absolute stereochemistry.



L7 ANSWER 25 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1994:427316 CAPLUS
DOCUMENT NUMBER: 121:27316
TITLE: Binding of anti-inflammatory .alpha.-melanocyte-stimulating-hormone peptides and proinflammatory cytokines to receptors on melanoma cells
AUTHOR(S): Lyson, Krzysztof; Ceriani, Giuliana; Takashima, Akira; Catania, Anna; Lipton, James M.
CORPORATE SOURCE: Dep. Physiol., Univ. Tex. Southwest. Med. Cent., Dallas, TX, 75235-9068, USA
SOURCE: NeuroImmunoModulation (1994), 1(2), 121-6
CODEN: NROIEM; ISSN: 1021-7401
DOCUMENT TYPE: Journal
LANGUAGE: English
AB .alpha.-MSH (.alpha.-MSH1-13), a peptide derived from proopiomelanocortin, has remarkable anti-inflammatory and antipyretic activities. This peptide and a tripeptide that forms the C-terminal portion of the mol. (.alpha.-MSH11-13; Lys-Pro-Val) inhibit inflammation when given centrally or peripherally. Because of the similarity in their actions, the tripeptide has been presumed to be the amino acid message sequence underlying the effects of .alpha.-MSH1-13. To test the possibility that the 2 peptides occupy the same receptors, competitive binding expts. were performed with B16 mouse melanoma cells that are known to have .alpha.-MSH1-13 receptors. In these expts., .alpha.-MSH11-13 did not inhibit binding of a radiolabeled .alpha.-MSH1-13 analog. This finding suggests that .alpha.-MSH1-13 and .alpha.-MSH11-13 exert their

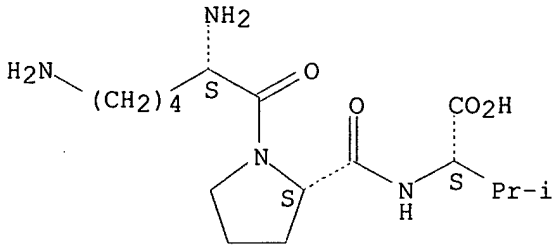
antiinflammatory/antipyretic/anticytokine effects via stimulation of sep. receptors. Because .alpha.-MSH inhibits the effects of several cytokines including inflammation caused by interleukin (IL)-6 and IL-8, the capacity of these cytokines to compete for .alpha.-MSH binding sites was tested. There was no evidence that these proinflammatory cytokines bind to .alpha.-MSH receptors on murine melanoma cells. Although further tests with host cells involved in inflammation are required, the latter result is the first evidence that the mechanism of anticytokine action of .alpha.-MSH does not depend upon peptide/cytokine competition for binding sites.

IT **67727-97-3**, Lys-Pro-Val
RL: BIOL (Biological study)
(melanoma cell receptor binding of, .alpha.-MSH receptors in relation to)

RN 67727-97-3 CAPLUS

CN L-Valine, L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 26 OF 79 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1994:315802 CAPLUS

DOCUMENT NUMBER: 120:315802

TITLE: Synthetic tetrapeptides for the prevention of Schistosome parasite infection

INVENTOR(S): Mckerrow, James H.; Cohen, Fred E.

PATENT ASSIGNEE(S): The Regents of the University of California, USA

SOURCE: U.S., 35 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5284829	A	19940208	US 1991-798565	19911126

PRIORITY APPLN. INFO.: US 1991-798565 19911126

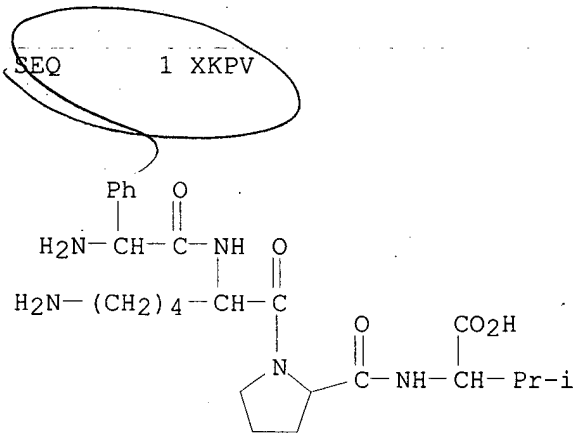
AB Using a 3-dimensional computer model of parasite serine protease based on the primary sequence of the enzyme and its homol. with other serin protease, tetrapeptide serine protease inhibitors were designed and and constructed. The effects of BG-AAa-AAb-AAc-AAd-PI (BG=peptide blocking group; AAa.fwdarw.d= defined amino acid residues; PI=protease inhibitor consisting of halo Me ketones or boronic acid) on inhibiting the enzyme activity and cercarial penetration of human skin were obsd. Soap and a pharmaceutical dosage form such as a lotion,a cream, or a spray contg. these tetrapeptides are claimed for use in the prevention of Schistosome parasite infection.

IT **154484-92-1D**, amino terminus blocked and carboxyl terminus conjugated with protease inhibitor **154485-29-7D**, amino terminus blocked and carboxyl terminus conjugated with protease inhibitor **154485-49-1D**, amino terminus blocked and carboxyl terminus

conjugated with protease inhibitor **154485-70-8D**, amino terminus blocked and carboxyl terminus conjugated with protease inhibitor **154485-84-4D**, amino terminus blocked and carboxyl terminus conjugated with protease inhibitor **154486-02-9D**, amino terminus blocked and carboxyl terminus conjugated with protease inhibitor
RL: BIOL (Biological study)
(tetrapeptide, as serine protease inhibitor for prevention of Schistosome parasite infection)

RN 154484-92-1 CAPLUS
CN L-Valine, N-[1-[N2-(2-phenylglycyl)-L-lysyl]-L-prolyl]- (9CI) (CA INDEX NAME)

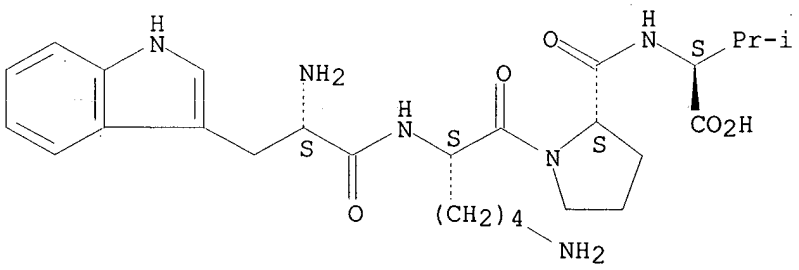
SEQ 1 XKPV



RN 154485-29-7 CAPLUS
CN L-Valine, N-[1-(N2-L-tryptophyl-L-lysyl)-L-prolyl]- (9CI) (CA INDEX NAME)

SEQ 1 WKPV

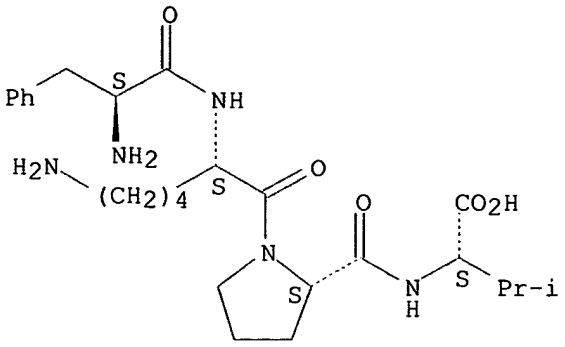
Absolute stereochemistry.



RN 154485-49-1 CAPLUS
CN L-Valine, N-[1-(N2-L-phenylalanyl-L-lysyl)-L-prolyl]- (9CI) (CA INDEX NAME)

SEQ 1 FKPV

Absolute stereochemistry.

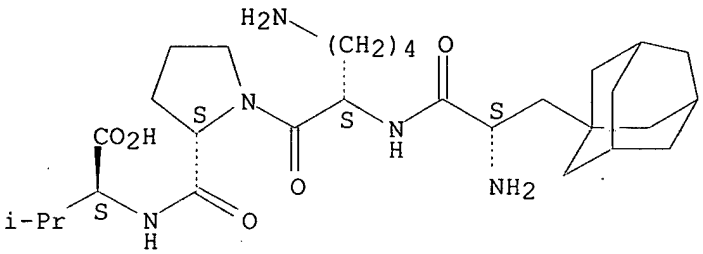


RN 154485-70-8 CAPLUS
CN L-Valine, N-[1-[N2-(3-tricyclo[3.3.1.13,7]dec-1-yl-L-alanyl)-L-lysyl]-L-prolyl]- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 AKPV

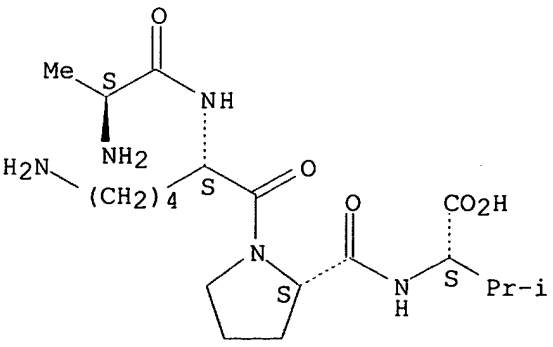
Absolute stereochemistry.



RN 154485-84-4 CAPLUS
CN L-Valine, N-[1-(N2-L-alanyl-L-lysyl)-L-prolyl]- (9CI) (CA INDEX NAME)

SEQ 1 AKPV

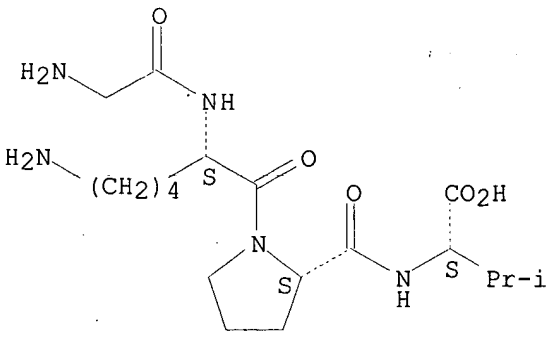
Absolute stereochemistry.



RN 154486-02-9 CAPLUS
CN L-Valine, glycyl-L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

SEQ 1 GKPV

Absolute stereochemistry.

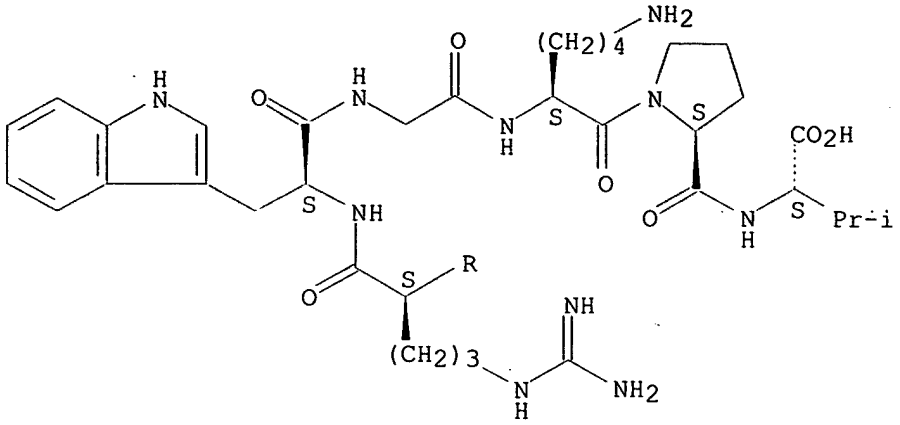


L7 ANSWER 27 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1994:240851 CAPLUS
DOCUMENT NUMBER: 120:240851
TITLE: Differential modulation of invertebrate hemocyte motility by CRF, ACTH, and its fragments
AUTHOR(S): Genedani, Susanna; Bernardi, Mara; Ottaviani, Enzo; Franceschi, Claudio; Leung, Michael; Stefano, George B.
CORPORATE SOURCE: Inst. Pharmacol., Univ. Modena, Modena, 41100, Italy
SOURCE: Peptides (New York, NY, United States) (1994), 15(2), 203-6
CODEN: PPTDD5; ISSN: 0196-9781
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Various reports have shown that invertebrate hemocytes are responsive to mammalian neuropeptides and cytokines. In the present study, the authors demonstrate that ACTH-releasing factor (CRF) and ACTH (ACTH) fragments (1-24), (1-4), (4-9), (1-13), (1-17), and (11-24) significantly stimulate molluscan hemocyte migration, and the whole sequence (1-39) and the fragment (4-11) have an inhibitory effect. Differences between species were found with respect to the response to individual fragments. Addnl., the (4-11) fragment was able to antagonize some of the stimulatory fragments (4-9) as well as tumor necrosis factor (TNF-.alpha.)-induced chemotaxis. The authors' results suggest that invertebrate hemocytes are able to response to CRF and ACTH fragments that in turn provide further evidence of the complexity of intracellular signaling within the immune system in relatively primitive animals. Thus, auto- and neuroimmunoregulatory activities in mammals must have had an earlier beginning than previously believed.
IT **22006-64-0**, ACTH(1-13)
RL: BIOL (Biological study)
(hemocyte migration response to, in mollusk)
RN 22006-64-0 CAPLUS
CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

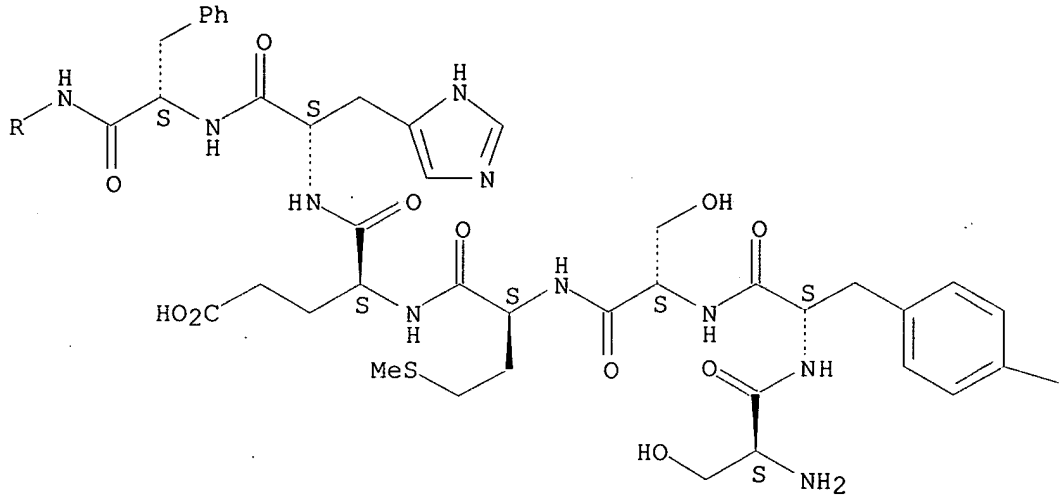
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PAGE 2-B

L7 ANSWER 28 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1994:218529 CAPLUS
DOCUMENT NUMBER: 120:218529
TITLE: Development of a fully automated multichannel peptide synthesizer with integrated TFA cleavage capability
AUTHOR(S): Neimark, Jean; Briand, Jean Paul
CORPORATE SOURCE: CNRS, Strasbourg, Fr.
SOURCE: Peptide Research (1993), 6(4), 219-28
CODEN: PEREEO; ISSN: 1040-5704
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A fully automated multichannel peptide synthesizer has been constructed which performs simultaneous and rapid assembly of peptides on a 20-200 .mu.mol scale. In situ activation of amino acids using BOP or PyBOP reagents was chosen to give an optimized coupling chem. Specially designed blocks of valves, with a zero dead vol. combined with an original circuitry, permit the distribution of amino acids derivs. and reagents predissolved in DMF. Either tert-butoxycarbonyl (Boc) or 9-fluorenylmethoxycarbonyl (Fmoc) chem. can be adapted on the synthesizer. In Boc synthesis a very rapid protocol involving Boc group deprotection in neat trifluoroacetic acid (TFA), followed by the concomitant steps of neutralization and coupling, allows the addn. of three amino acids per h on each channel. In Fmoc chem. an automatic TFA cleavage system was integrated into the synthesizer that allows the peptides to be cleaved from the resin directly within the reactors used for synthesis. The stability of the Fmoc amino acid derivs. in soln. in DMF was investigated, and decompn. was insignificant during the time-span of a synthesis. The satisfactory performance of the instrument was demonstrated by routine synthesis of 15-20 mer peptides.

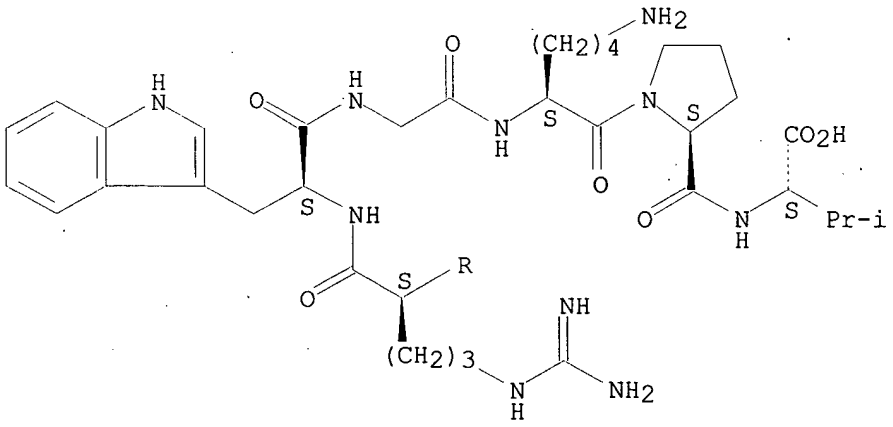
IT **153919-16-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, by solid-phase methods, development of fully automated multichannel synthesizer for)

RN 153919-16-5 CAPLUS
CN .alpha.1-13-Corticotropin, N-L-cysteinyl- (9CI) (CA INDEX NAME)

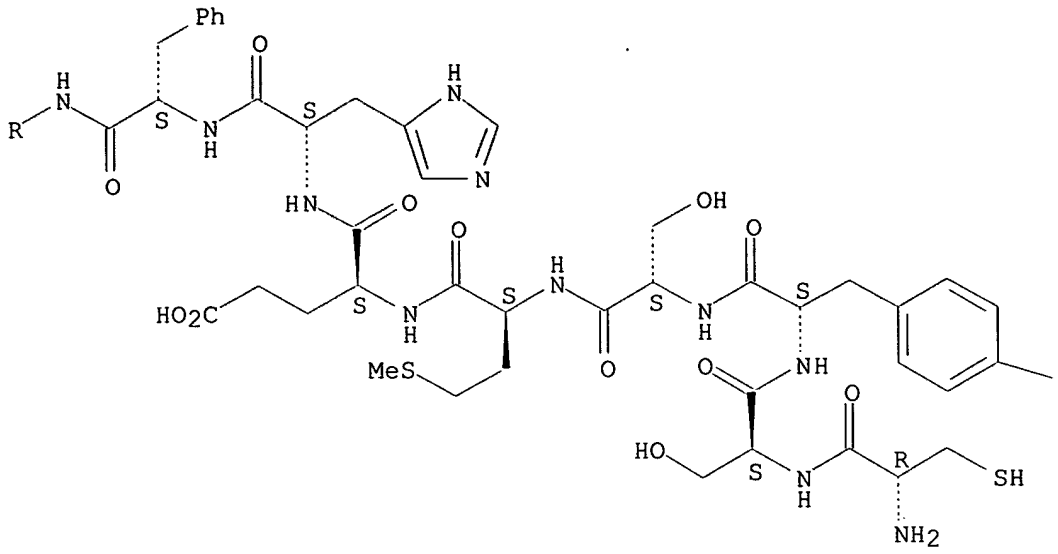
SEQ 1 CSYSMEHFRW GKPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PAGE 2-B

OH

L7 ANSWER 29 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1994:31183 CAPLUS
DOCUMENT NUMBER: 120:31183
TITLE: Comparative multiple synthesis of fifty linear peptides: Evaluation of cotton carrier vs. T bag-benzhydrylamine resin
AUTHOR(S): Rinnova, Marketa; Jezek, Jan; Malon, Petr; Lebl, Michal
CORPORATE SOURCE: Inst. Org. Chem. Biochem., Czech. Acad. Sci., Czech.
SOURCE: Peptide Research (1993), 6(2), 88-94
CODEN: PEREEO; ISSN: 1040-5704
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Parallel simultaneous synthesis of 50 linear peptides has been carried out in order to compare in detail 2 promising methodologies of simultaneous multiple peptide synthesis (SMPS): the "T bag" method, utilizing 4-methylbenzhydrylamine resin (MeBHA), and synthesis on derivatized Fmoc-Gly-O-cotton (Fmoc = 9-fluorenylmethoxycarbonyl) fabric strips. The

basic set of expts., which utilizes identical Fmoc/tert-Bu strategy for both approaches, shows that the peptides synthesized on cotton are superior in purity to those synthesized using T bags. In expts. utilizing tert-butoxycarbonyl (Boc)/benzyl strategy in T bags, the purities of peptides were higher than in the case of peptides synthesized in T bags by Fmoc/tert-Bu strategy, and comparable with the purities achieved in synthesis performed on cotton. The lower yields on cotton are caused by mech. losses in the given exptl. arrangement.

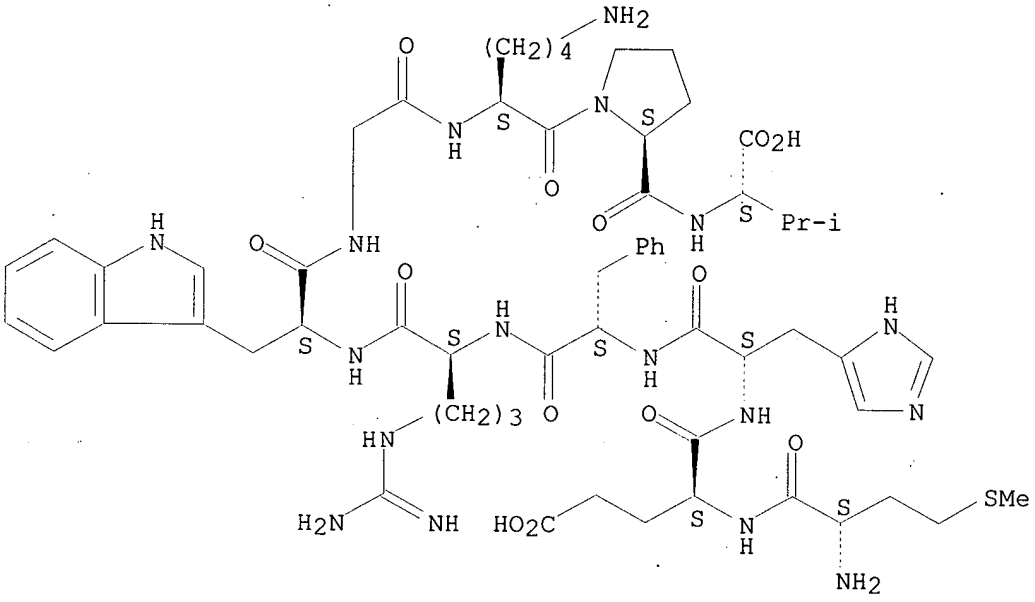
IT **151992-30-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, by simultaneous solid-phase methods, methylbenzhydrylamine resin and cotton supports for)

RN 151992-30-2 CAPLUS

CN L-Valine, L-methionyl-L-.alpha.-glutamyl-L-histidyl-L-phenylalanyl-L-arginyl-L-tryptophylglycyl-L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

SEQ 1 MEHFRWGKPV

Absolute stereochemistry.



L7 ANSWER 30 OF 79 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1993:641595 CAPLUS
DOCUMENT NUMBER: 119:241595
TITLE: Molecular cloning, expression, and gene localization of a fourth melanocortin receptor
AUTHOR(S): Gantz, Ira; Miwa, Hiroto; Konda, Yoshitaka; Shimoto, Yoshimasa; Tashiro, Takao; Watson, Stanley J.; DelValle, John; Yamada, Tadataka
CORPORATE SOURCE: Med. Cent., Univ. Michigan, Ann Arbor, MI, 48109-0386, USA
SOURCE: Journal of Biological Chemistry (1993), 268(20), 15174-9
CODEN: JBCHA3; ISSN: 0021-9258
DOCUMENT TYPE: Journal
LANGUAGE: English

Searched by Barb O'Bryen, STIC 308-4291

AB The recent cloning of three melanocortin receptors suggests an unexpected diversity in this family of seven transmembrane G-protein linked receptors. Herein, the authors report the cloning, expression, and gene localization of a fourth human melanocortin receptor, the melanocortin-4 receptor. By Northern blot anal. and in situ hybridization, this receptor is expressed primarily in the brain, but its expression is notably absent in the adrenal cortex, melanocytes, and placenta. Agonist stimulation of COS-1 cells transiently transfected and L-cells permanently transfected with the coding region of the cloned melanocortin-4 receptor leads to increases in intracellular cyclic 3',5'-adenosine monophosphate. The profile of the responses of the melanocortin-4 receptor to different melanocortins distinguishes it from melanocortin receptors previously described. Using the technique of fluorescent in situ hybridization, the gene encoding the melanocortin-4 receptor was localized to chromosome 18 (q21.3).

IT **10466-28-1 22006-64-0**, .alpha.1-13-Corticotropin
RL: BIOL (Biological study)
(melanocortin-4 receptor of human binding by)

RN 10466-28-1 CAPLUS

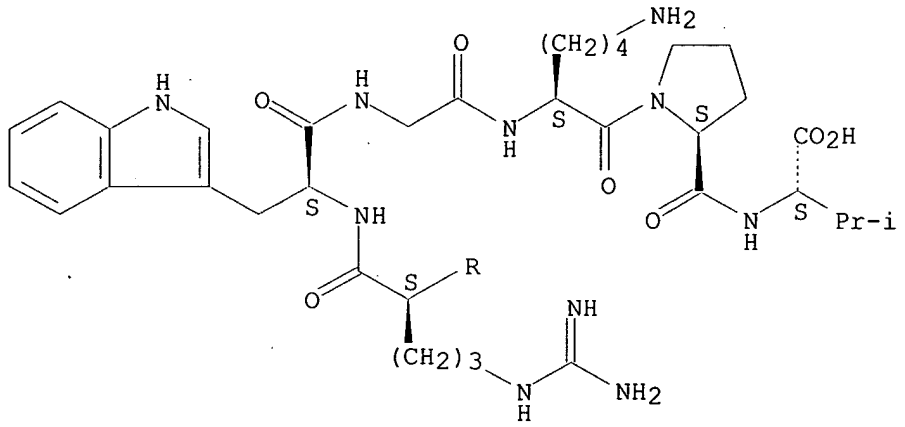
CN .alpha.-Melanotropin (swine), 13-L-valine- (9CI) (CA INDEX NAME)

NTE modified

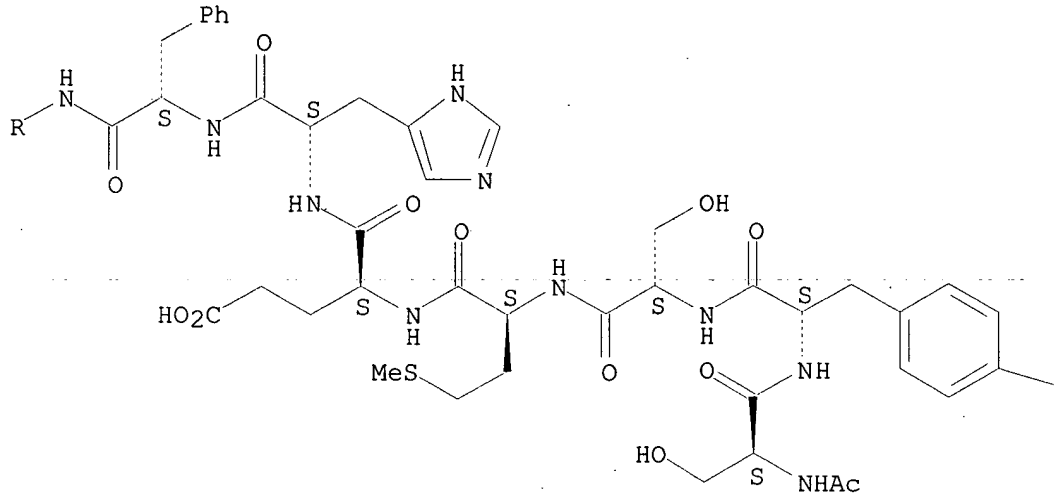
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



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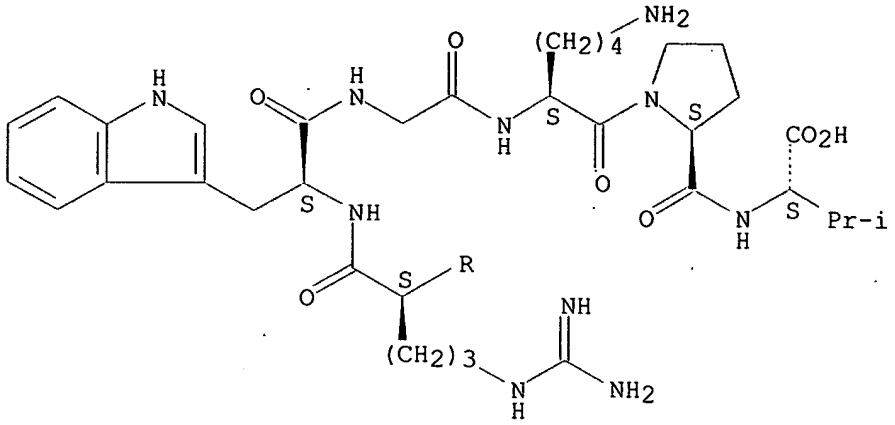
OH

RN 22006-64-0 CAPLUS
CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

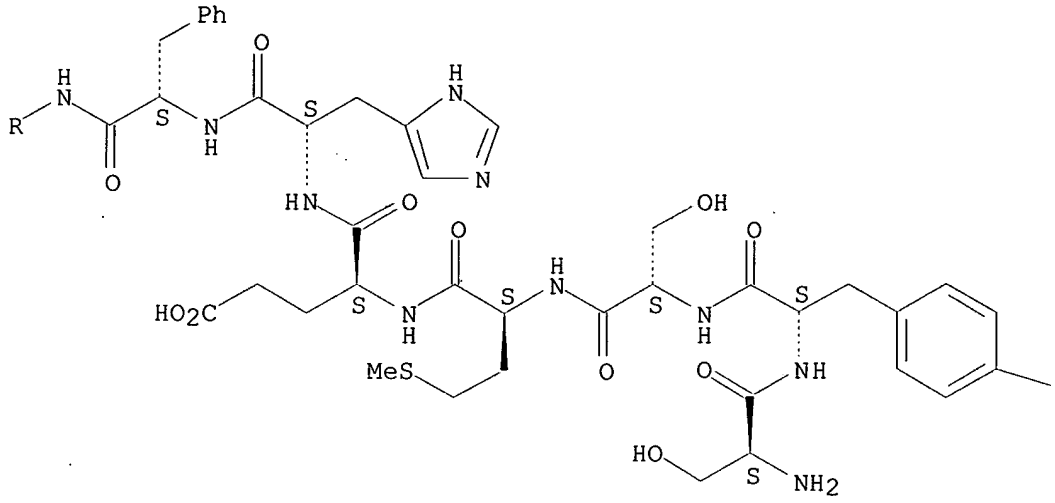
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



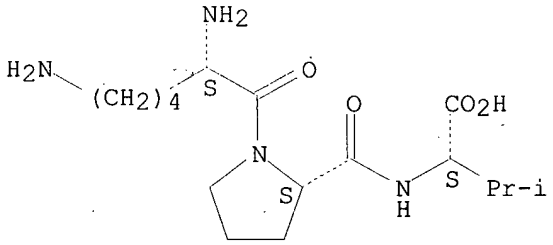
PAGE 2-A



PAGE 2-B

L7 ANSWER 31 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1993:401050 CAPLUS
DOCUMENT NUMBER: 119:1050
TITLE: Effects of pro-opiomelanocortin peptides on adrenocortical steroidogenesis
AUTHOR(S): Szalay, Katalin Sz.
CORPORATE SOURCE: Inst. Exp. Med., Hung. Acad. Sci., Budapest, 1450, Hung.
SOURCE: Journal of Steroid Biochemistry and Molecular Biology (1993), 45(1-3), 141-6
CODEN: JSBBEZ; ISSN: 0960-0760
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review, with 31 refs., on the effects of pro-opiomelanocortin (POMC) peptides on adrenocortical steroidogenesis. Included were discussions on .alpha.-MSH which has a specific glomerulotropic effect and which potentiates both the mineralocorticotropic and glucocorticotropic effects of ACTH; on the fragments ACTH-(4-10) and ACTH-(11-13) which are responsible for the glomerulotropic effect of .alpha.-MSH; and on .beta.-endorphin, which enhances, inhibits, or has no effect on corticosteroidogenesis, depending on the dose and on the functional state of the adrenocortical cells and which antagonizes the effect of .alpha.-MSH on aldosterone prodn.
IT **67727-97-3**, ACTH-(11-13)
RL: BIOL (Biological study)
(.alpha.-MSH adrenal glomerulotropic effect mediation by)
RN 67727-97-3 CAPLUS
CN L-Valine, L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



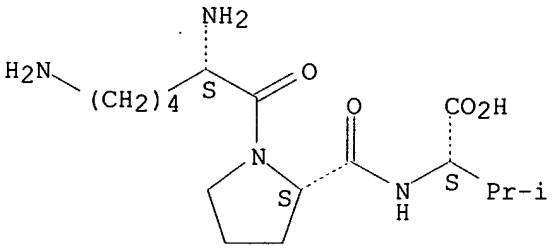
L7 ANSWER 32 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1992:440660 CAPLUS
DOCUMENT NUMBER: 117:40660
TITLE: Peripheral analgesic activities of peptides related to .alpha.-melanocyte stimulating hormone and interleukin-1.beta.193-195
AUTHOR(S): Poole, S.; Bristow, A. F.; Lorenzetti, B. B.; Das, R. E. Gaines; Smith, T. W.; Ferreira, S. H.
CORPORATE SOURCE: Div. Endocrinol., Natl. Inst. Biol. Stand. Control, Potters Bar/Herts., EN6 3QG, UK
SOURCE: British Journal of Pharmacology (1992), 106(2), 489-92
CODEN: BJPCBM; ISSN: 0007-1188
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The hyperalgesic effects of interleukin-1.beta. (IL-1.beta.) and prostaglandin E2 (PGE2) were measured in rats. Hyperalgesic responses to IL-1.beta. were inhibited in a dose-dependent manner by .alpha.-MSH (.alpha.-MSH)-related peptides with the following order of potency: [Nle4,D-Phe7].alpha.-MSH > .alpha.-MSH > Lys-D-Pro-Val > Lys-Pro-Val >

Lys-D-Pro-Thr > D-Lys-Pro-Thr. Hyperalgesic responses to PGE2 were not inhibited by Lys-D-Pro-Thr and D-Lys-Pro-Thr but were inhibited in a dose-dependent manner by the other peptides with the same order of potency as against IL-1.beta.. The potencies of [Nle4,D-Phe7].alpha.-MSH and .alpha.-MSH were greatly diminished by deletion of their C-terminal tripeptide, Lys11-Pro-Val13. Nor-binaltorphimine (Nor-BNI) largely reversed the analgesic effects of .alpha.-MSH, [Nle4, D-Phe7].alpha.-MSH, Lys-Pro-Val and Lys-D-Pro-Val indicating that .kappa.-opioid receptors mediated the analgesic activity of these peptides. Nor-BNI did not antagonize the inhibition by Lys-D-Pro-Thr and D-Lys-Pro-Thr of IL-1.beta. evoked hyperalgesia indicating that these peptides were not acting via .kappa.-opioid receptors.

IT **67727-97-3 125905-17-1**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(analgesic activity of, structure in relation to)

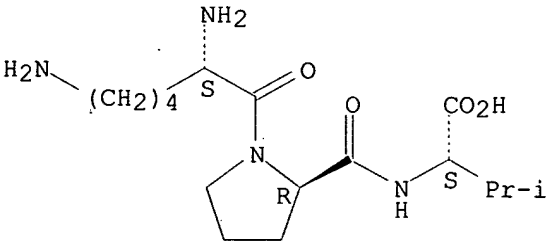
RN 67727-97-3 CAPLUS
CN L-Valine, L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 125905-17-1 CAPLUS
CN L-Valine, L-lysyl-D-prolyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 33 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1992:34564 CAPLUS
DOCUMENT NUMBER: 116:34564
TITLE: Preparation of antipyretic and antiinflammatory peptides
INVENTOR(S): Lipton, James M.
PATENT ASSIGNEE(S): USA
SOURCE: U.S., 9 pp. Cont. of U.S. Ser. No. 76,625, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5028592	A	19910702	US 1988-229331	19880805
CA 1300502	A1	19920512	CA 1987-552067	19871117
US 5157023	A	19921020	US 1991-672965	19910321

PRIORITY APPLN. INFO.: US 1984-643023 19840821
US 1986-894910 19860808
US 1987-76625 19870723
US 1988-229331 19880805

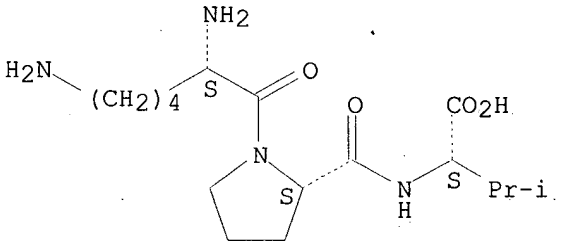
AB Peptides having 3-13 amino acids and contg. the Lys-Pro-Val sequence are antipyretics and inflammation inhibitors. Lys-Pro-Val and its protected derivs. were prepd. by known methods. Ac2-Lys-Pro-Val-NH2 (1.25 .mu.g/kg; i.v.) reduced in rabbits the histamine-induced blue "weal" formation, which is indicative of antiinflammatory activity (Sparrow and Wilhelm, 1957). Coadministration of Cu salts increased the antipyretic potency of the tripeptide.

IT **67727-97-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as inflammation inhibitor)

RN 67727-97-3 CAPLUS

CN L-Valine, L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 34 OF 79 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1991:506514 CAPLUS

DOCUMENT NUMBER: 115:106514

TITLE: .alpha.-Melanocyte-stimulating hormone reduces interleukin-1.beta. effects on rat stomach preparations possibly through interference with a type I receptor

AUTHOR(S): Mugridge, Kenneth G.; Perretti, Mauro; Ghiara, Paolo; Parente, Luca

CORPORATE SOURCE: Sclavo Res. Cent., Siena, 53100, Italy

SOURCE: European Journal of Pharmacology (1991), 197(2-3), 151-5
CODEN: EJPHAZ; ISSN: 0014-2999

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Contractions elicited by CaCl2 in isolated rat stomach strip prepns. have been reported to be potentiated by interleukin-1.beta. (IL-1.beta.). Thus, it was detd. if this effect can be reduced by the putative IL-1.beta. antagonist, .alpha.MSH. Addnl., the effects of .alpha.MSH on the specific binding of IL-1.beta. to B- and T-cells were investigated to further clarify its inhibitory activities. Both .alpha.MSH and its carboxyl terminal tripeptide concn. dependently reduced the potentiation of CaCl2-induced contractions caused by IL-1.beta. but not those caused by LTD4, the parent mol. being approx. 250 times more active. Addnl., both peptides potently and selective reduced 125I-IL-1.beta. binding to the T-cell sub-clone EL4-6.1 but not to the B-cell sub-clone 1H7. The results

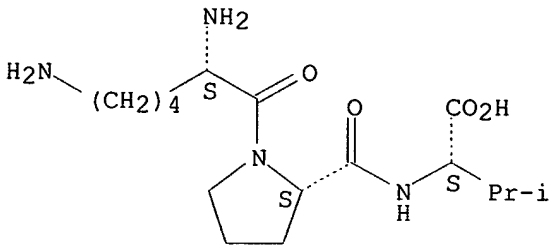
indicate that IL-1.beta. effects on rat stomach may be mediated through a type-I (80 kDa) IL-1.beta. receptor.

IT **67727-97-3**
RL: BIOL (Biological study)
(interleukin 1.beta. binding by T-lymphocyte and its effect on gastric motility attenuation by)

RN 67727-97-3 CAPLUS

CN L-Valine, L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 35 OF 79 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1991:465093 CAPLUS

DOCUMENT NUMBER: 115:65093

TITLE: Esterase activity of synthetic fragments of human adrenocorticotropic hormone

AUTHOR(S): Eklund, Kari K.; Vainio, Petri; Virtanen, Jorma A.; Kinnune, Paavo K. J.

CORPORATE SOURCE: Dep. Med. Chem., Univ. Helsinki, Helsinki, Finland

SOURCE: Biochemical and Biophysical Research Communications (1991), 177(1), 235-42
CODEN: BBRCA9; ISSN: 0006-291X

DOCUMENT TYPE: Journal

LANGUAGE: English

AB ACTH has been extensively studied in terms of structure-function relation. Here the ability of synthetic fragments of ACTH to hydrolyze a fluorogenic esterase substrate, 4-methylumbelliferyloleate (MUBO), is presented. The measured esterase activities (in .mu.mol 4-MU/mol/s) were: 79.7 for ACTH1-13, 385.9 for ACTH3-18, 503.0 for ACTH1-19, 1249.9 for [D-Ser3]ACTH1-24, and 1350 for ACTH1-24. Although the significance of the obsd. esterase activities in the actual mol. mechanisms of action of ACTH remains to be established, it is worth noticing that the esterase activities of the different ACTH fragments closely parallel their reported ability to activate the brain lipase as well as their in vivo ability to induce steroidogenesis in adrenal cortex.

IT **22006-64-0**, ACTH 1-13
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(esterase activity of)

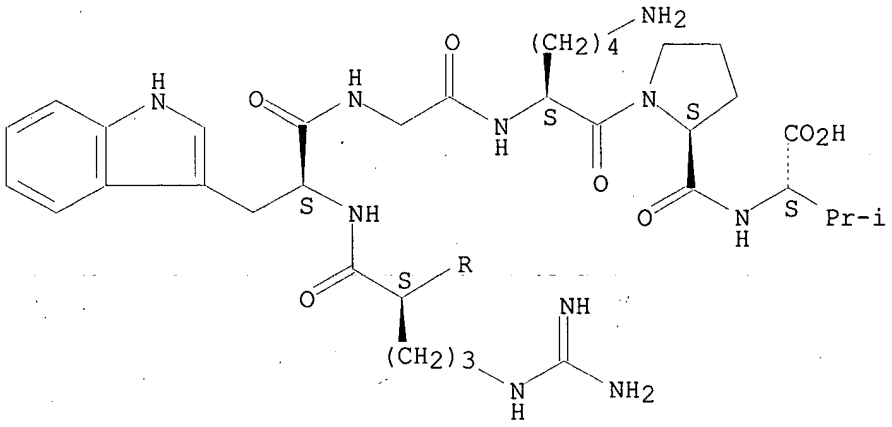
RN 22006-64-0 CAPLUS

CN .alpha.-1-13 Corticotropin (8CI, 9CI) (CA INDEX NAME)

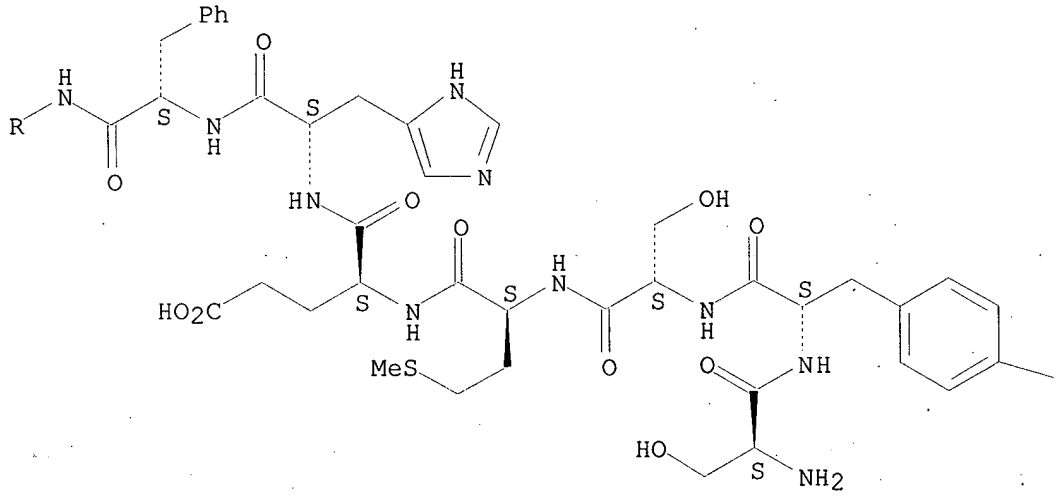
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PAGE 2-B

L7 ANSWER 36 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1991:423204 CAPLUS
DOCUMENT NUMBER: 115:23204
TITLE: Melanocyte-stimulating hormone inhibitor and external preparation containing the same
INVENTOR(S): Takeuchi, Takuji; Sato, Chikara; Oba, Kenkichi; Sugiyama, Keikichi
PATENT ASSIGNEE(S): Lion Corp., Japan
SOURCE: Eur. Pat. Appl., 23 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 389950	A1	19901003	EP 1990-105354	19900321
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
US 5126327	A	19920630	US 1990-497191	19900322
JP 03123716	A2	19910527	JP 1990-74078	19900323
JP 03123717	A2	19910527	JP 1990-74079	19900323

PRIORITY APPLN. INFO.: JP 1989-71215 19890323
JP 1989-93643 19890413
OTHER SOURCE(S): MARPAT 115:23204

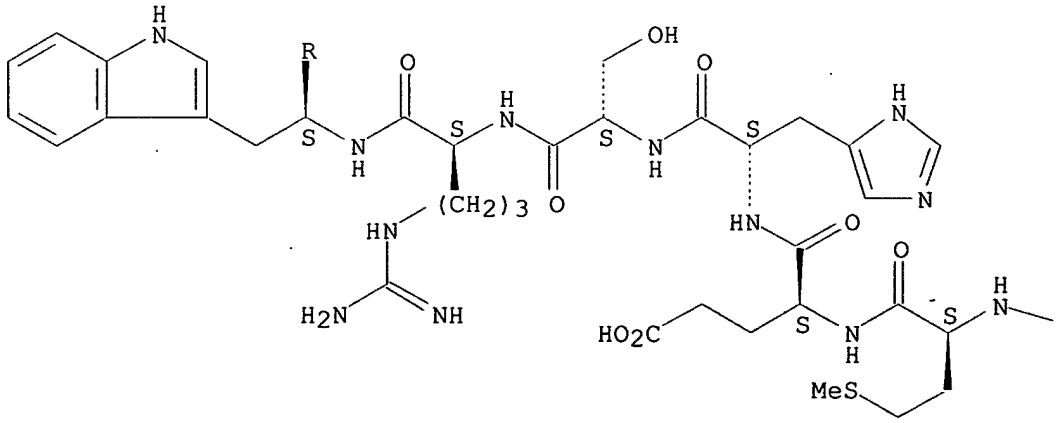
AB A MSH inhibitor contains the amino acid sequence -His-Ser-Arg-Trp-, -Trp-Arg-Ser-His-, or -Leu-Ala-Cys-Ala-Arg-. The MSH inhibitor in an external prepn. is applied to the skin to treat chloasmata and freckles. Peptide Ac-Met-Glu-His-Ser-Arg-Trp-Gly-Lys-NH2 inhibited eumelanin prodn. stimulated by .alpha.-MSH at hair follicles of yellow-mice skin grafts. Various creams, lotions, and beauty essence formulations are presented.

IT **133890-24-1 133890-25-2**
RL: BIOL (Biological study)
(MSH inhibitor)
RN 133890-24-1 CAPLUS
CN .alpha.1-13-Corticotropin, 7-L-serine- (9CI) (CA INDEX NAME)

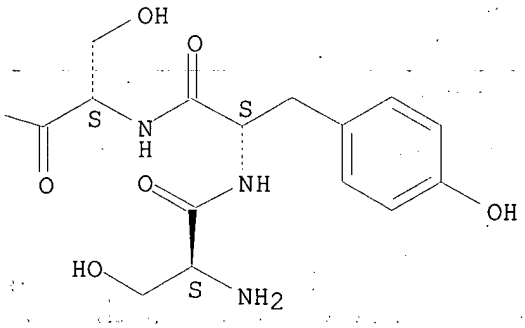
SEQ 1 SYSMEHSRWG KPV

Absolute stereochemistry.

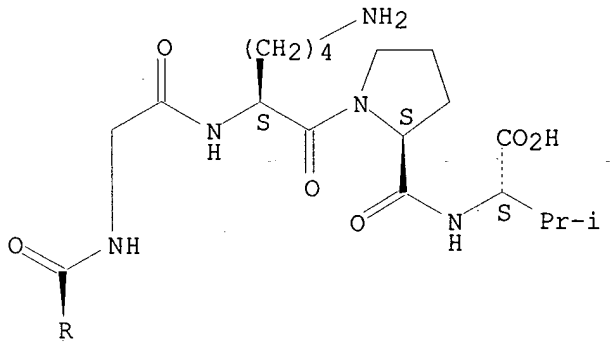
PAGE 1-A



PAGE 1-B



PAGE 2-A



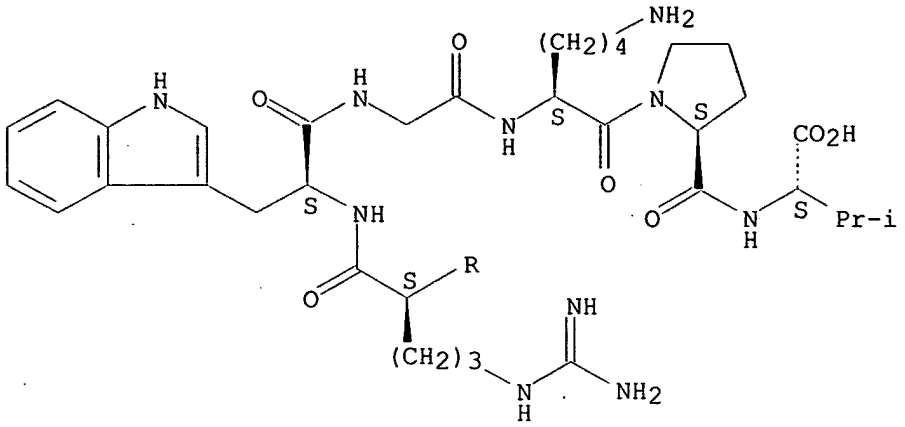
RN 133890-25-2 CAPLUS
CN .alpha.-Melanotropin (swine), 7-L-serine-13-L-valine- (9CI) (CA INDEX NAME)

NTE modified

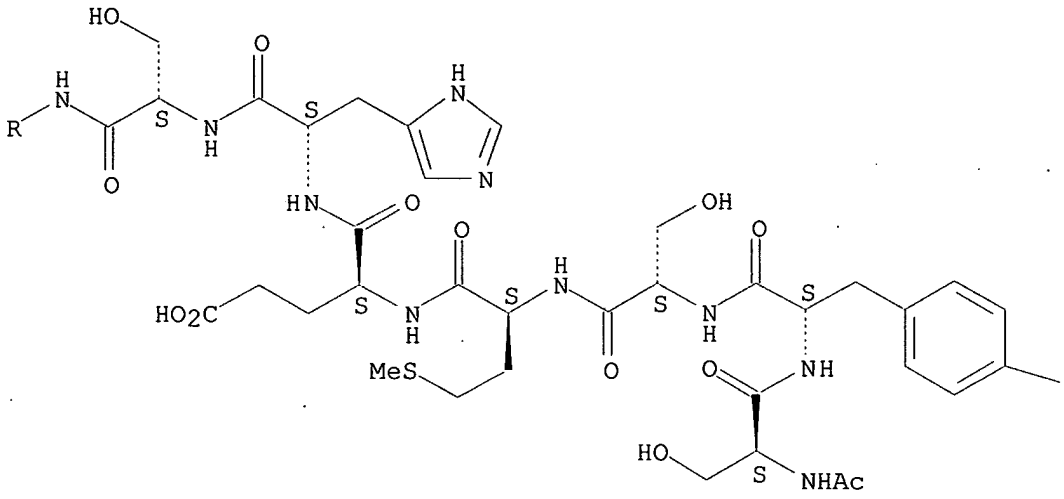
SEQ 1 SYSMEHSRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PAGE 2-B

L7 ANSWER 37 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1991:401185 CAPLUS
DOCUMENT NUMBER: 115:1185
TITLE: Brain ACTH prevents stress gastric lesions in rats
AUTHOR(S): Hernandez, Daniel E.; Morin, Pilar; Salaiz, Arthur B.; Moreira, Marcos A.; Jennes, Lothar
CORPORATE SOURCE: Sch. Med., Univ. South. California, Los Angeles, CA, 90033, USA
SOURCE: Brain Research Bulletin (1990), 25(4), 605-7
CODEN: BRBUDU; ISSN: 0361-9230
DOCUMENT TYPE: Journal
LANGUAGE: English

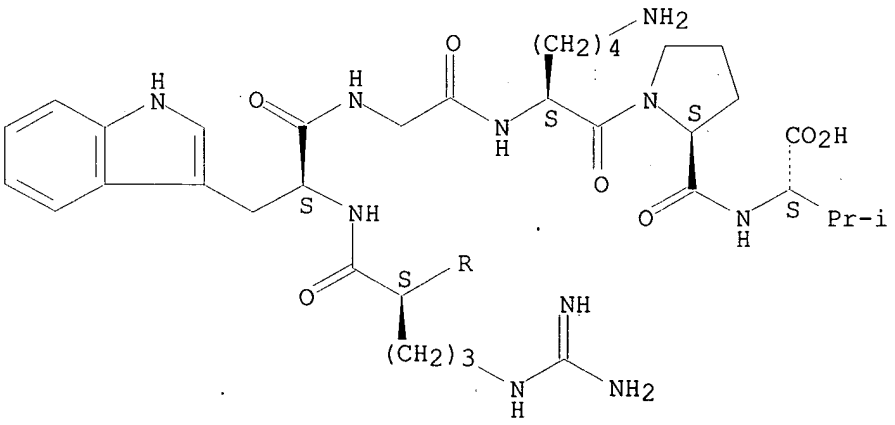
AB This study evaluated the effect of ACTH and several ACTH fragments on the development of gastric glandular lesions induced by cold-restraint stress in rats. Intracerebroventricular administration of ACTH1-39 dose-dependently (0.1-10 .mu.g) inhibited stress gastric lesion formation. Studies with smaller mol. wt. forms of ACTH (in a dose equimolar to 10 .mu.g of ACTH1-39) revealed that ACTH1-13 and ACTH1-10 were also protective. The ACTH fragments ACTH5-10, ACTH34-39 and ACTH1-17 were without effect. Immunoneutralization of endogenous brain ACTH1-39 increased stress gastric lesion severity. Antisera raised against synthetic somatostatin, gonadotropin-releasing hormone, and L-enkephalin were ineffective. These results with ACTH coupled with a previous demonstration of a protective effect of .beta.-endorphin suggest that specific brain pro-opiomelanocortin gene products modulate gastric mucosal integrity in response to stress.

IT **22006-64-0**, ACTH1-13
RL: BIOL (Biological study)
(brain application of, stress-induced ulcers prevention by)
RN 22006-64-0 CAPLUS
CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

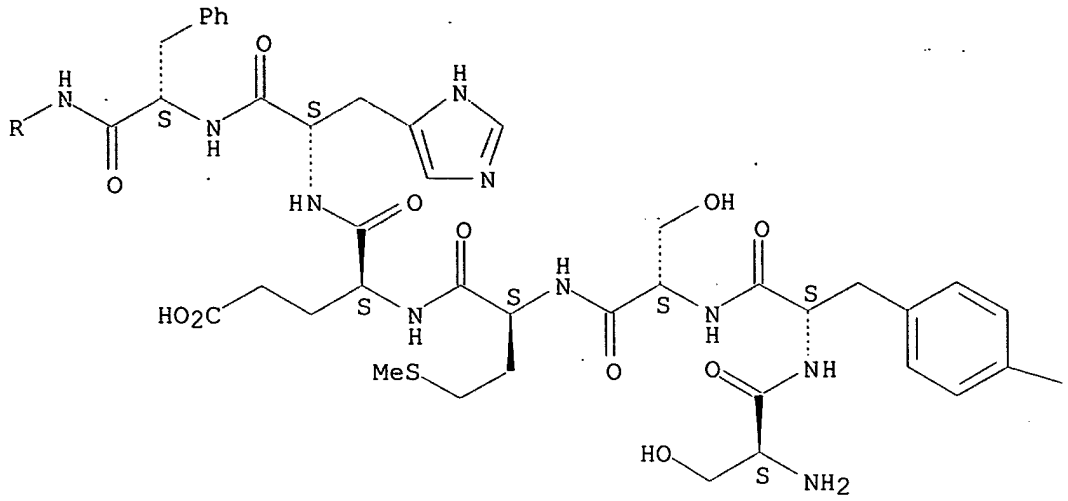
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PAGE 2-B

—OH

L7 ANSWER 38 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1991:58000 CAPLUS
DOCUMENT NUMBER: 114:58000
TITLE: Rat liver polysome N.alpha.-acetyltransferase: substrate specificity
AUTHOR(S): Yamada, Ryo; Bradshaw, Ralph A.
CORPORATE SOURCE: Coll. Med., Univ. California, Irvine, CA, 92717, USA
SOURCE: Biochemistry (1991), 30(4), 1017-21
CODEN: BICHAW; ISSN: 0006-2960
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The substrate specificity of polysome rat liver N.alpha.-acetyltransferase (peptide N-terminal acetyltransferase) (I) was examd. by utilizing a series of synthetic and natural substrates that was systematically altered with respect to N-terminal sequence and length. Families of peptides of the structure S-Y-S-G-G-L-L-L were generated by successively replacing the N-terminal serine, the penultimate tyrosine, and the antepenultimate serine with all 19 commonly occurring amino acids, which were then assessed for their reactivity with rat liver I. Only peptides with N-terminal serine, alanine, methionine, leucine, and phenylalanine were

modified. Glycine, lysine, arginine, valine, isoleucine, and tryptophan in the 2nd position were (with N-terminal serine) strongly inhibitory, and proline completely blocked modification. Third position substitutions had less of an effect on I activity with glycine, aspartic acid, glutamic acid, and tryptophan being most inhibiting (with N-terminal Ser-Tyr). These observations were generally in agreement with in situ modifications although there were some significant differences, particularly with respect to the N-terminal residues. Optimal chain length was detd. to be 10-11 residues with either synthetic peptides of the structure S-Y-S-(G)n-L-L-L or ACTH (ACTH) sequences ranging from 8 to 39 residues. The ACTH peptides were generally found to be several-fold better substrates than the corresponding synthetic ones. Activity was not affected by increased chain length beyond .apprx.17 residues. These data supported the view that polysome-catalyzed N.alpha.-acetylation occurs as a cotranslational event on nascent chains of .apprx.20-40 amino acids in length.

IT **22006-64-0**, .alpha.1-13-Corticotropin
RL: BIOL (Biological study)
(peptide N-terminal acetyltransferase of liver polysome specificity for, structure in relation to)

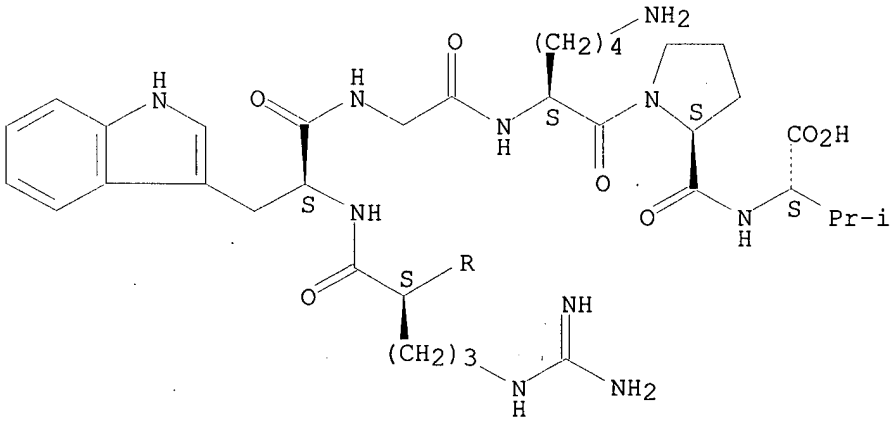
RN 22006-64-0 CAPLUS

CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

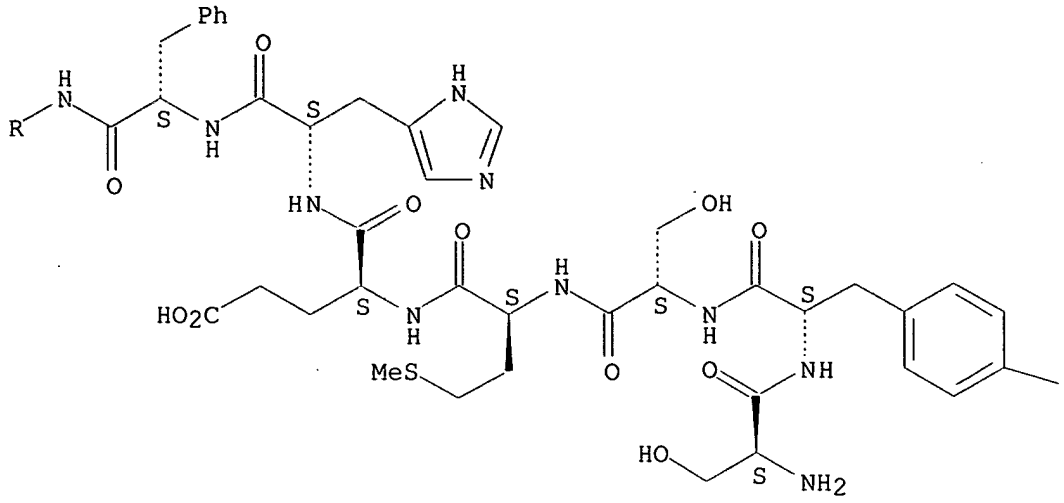
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PAGE 2-B

—OH

L7 ANSWER 39 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1991:56926 CAPLUS
DOCUMENT NUMBER: 114:56926
TITLE: Characterization of and cloning of genes for substrate-specific aminopeptidases of Saccharomyces cerevisiae
INVENTOR(S): Smith, John A.; Chang, Yie Hwa
PATENT ASSIGNEE(S): General Hospital Corp., USA
SOURCE: Eur. Pat. Appl., 34 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 359164	A2	19900321	EP 1989-116734	19890909
EP 359164	A3	19901114		

R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE

WO 9002814 A1 19900322 WO 1989-US3687 19890825
W: AU, DK, FI, KR
AU 8942210 A1 19900402 AU 1989-42210 19890825
PRIORITY APPLN. INFO.: US 1988-243733 19880913
US 1988-284244 19881214
WO 1989-US3687 19890825

AB Substrate-specific aminopeptidases AP1, AP2, and APX from S. cerevisiae recognizing a limited no. of amino-terminal dipeptides contg. a penultimate isoleucine or a terminal methionine are identified and partially characterized and the gene for AP1 cloned and sequenced. The signal sequence for AP1 that directs the protein to the vacuole is identified and polyclonal antibodies raised against this enzyme.

IT **131779-67-4**
RL: PRP (Properties)
(peptide fragment of substrate-specific aminopeptidase AP1 of Saccharomyces cerevisiae)

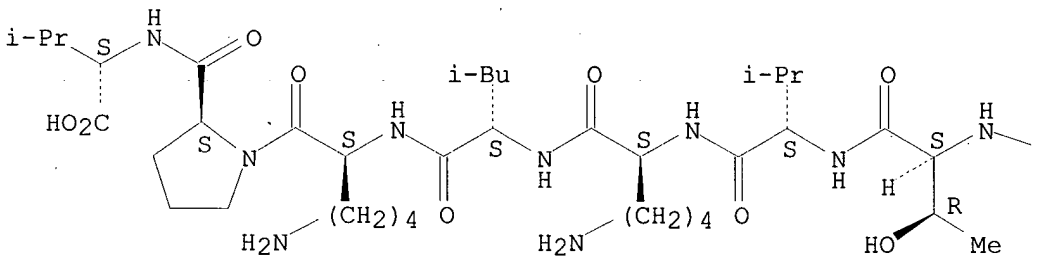
RN 131779-67-4 CAPLUS

CN L-Valine, L-valylglycyl-L-valyl-L-isoleucylglycyl-L-seryl-L-histidyl-L-valyl-L-.alpha.-aspartyl-L-alanyl-L-leucyl-L-threonyl-L-valyl-L-lysyl-L-leucyl-L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

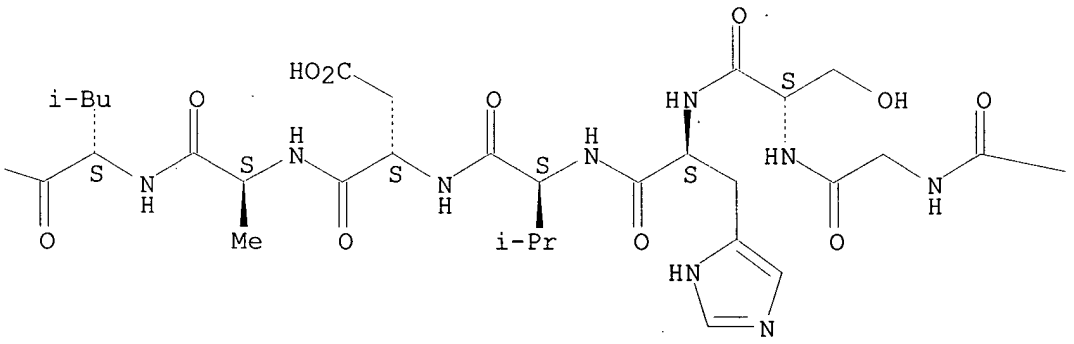
SEQ 1 VGVIGSHVDA LTVKLKPV

Absolute stereochemistry.

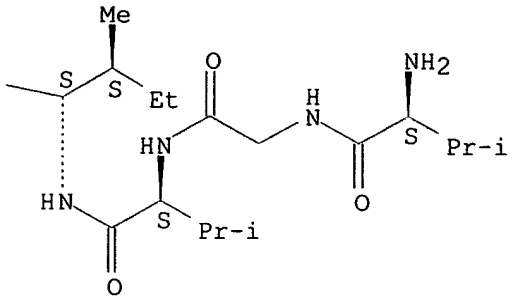
PAGE 1-A



PAGE 1-B



PAGE 1-C



L7 ANSWER 40 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1990:172444 CAPLUS
DOCUMENT NUMBER: 112:172444
TITLE: Proopiomelanocortin (POMC)-derived peptides and sleep in the rat. Part 1. Hypnogenic properties of ACTH derivatives
AUTHOR(S): Chastrette, N.; Cespuglio, R.; Jouvet, M.
CORPORATE SOURCE: Dep. Exp. Med., Claude-Bernard Univ., Lyon, 69373, Fr.
SOURCE: Neuropeptides (Edinburgh, United Kingdom) (1990), 15(2), 61-74
CODEN: NRPPDD; ISSN: 0143-4179
DOCUMENT TYPE: Journal
LANGUAGE: English

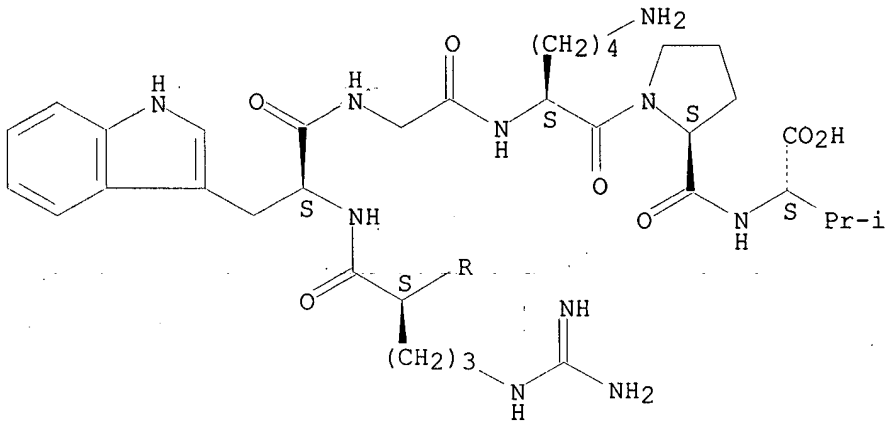
AB The sleep-wake effects of intracerebroventricularly injected pro-opiomelanocortin (POMC)-derived peptides are reported. ACTH (1 .mu.g) induces an awakening effect, while its two derivs., desacetyl-.alpha.-MSH (des-.alpha.-MSH, 1 ng) and ACTH-like intermediate lobe peptide (CLIP, 10 ng), are resp. able to increase slow wave sleep (SWS) and paradoxical sleep (PS); the hypnogenic effect of CLIP is also obsd. in hypophysectomized rats. Furthermore, 2 hypothalamic factors known to be involved in the control of POMC derivs. were also injected; MSH inhibiting factor (MIF) does not influence the vigilance states, while ACTH releasing factor (CRF, 1 .mu.g) increases the waking state. Finally, some preliminary results, obtained with a restraint stress and suggesting a possible interrelation between stress, sleep and POMC derivs., are discussed.

IT **22006-64-0**, ACTH(1-13)
RL: PRP (Properties)
(sleep-wake effects of, structure in relation to)
RN 22006-64-0 CAPLUS
CN .alpha.-1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

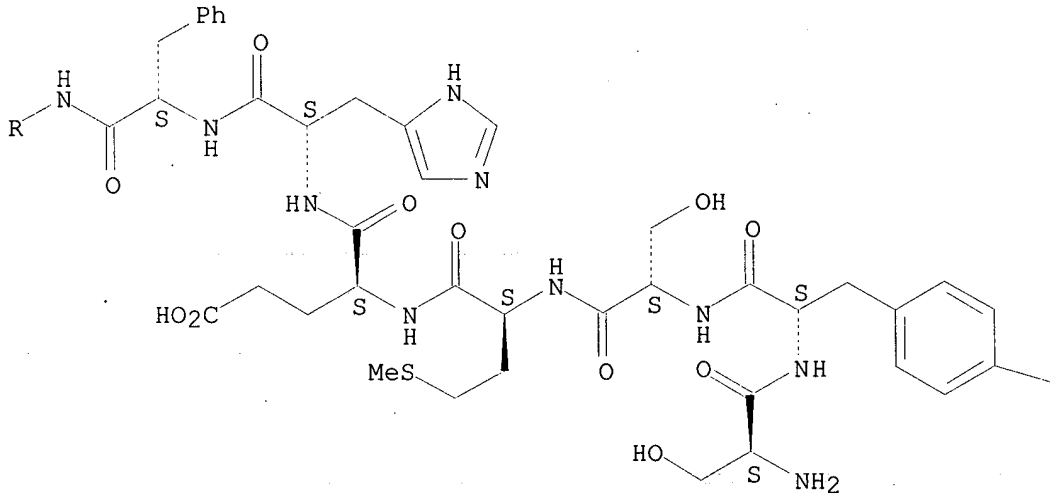
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



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L7 ANSWER 41 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1990:139835 CAPLUS
DOCUMENT NUMBER: 112:139835
TITLE: Preparation of proline-containing di- and tripeptides as analgesics
INVENTOR(S): Ferreira, Sergio Henriques; Bristow, Adrian Francis; Poole, Stephen
PATENT ASSIGNEE(S): National Research Development Corp., UK
SOURCE: Eur. Pat. Appl., 23 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 335662	A1	19891004	EP 1989-303054	19890328
EP 335662	B1	19950726		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
WO 8909226	A1	19891005	WO 1989-GB319	19890328
RW: AU, DK, FI, JP, KR, NO, US				
AU 8933637	A1	19891016	AU 1989-33637	19890328
AU 629826	B2	19921015		
GB 2217331	A1	19891025	GB 1989-6972	19890328
GB 2217331	B2	19911211		
ZA 8902269	A	19900725	ZA 1989-2269	19890328
JP 02504280	T2	19901206	JP 1989-503798	19890328
JP 2633369	B2	19970723		
IL 89770	A1	19941229	IL 1989-89770	19890328
JP 09165400	A2	19970624	JP 1996-193524	19890328
CA 1340186	A1	19981215	CA 1989-594884	19890328
DK 8905956	A	19900126	DK 1989-5956	19891127
NO 8904720	A	19900129	NO 1989-4720	19891127
FI 95273	B	19950929	FI 1989-5675	19891127
FI 95273	C	19960110		
US 5389615	A	19950214	US 1993-95856	19930723
US 5580855	A	19961203	US 1994-330845	19941027

PRIORITY APPLN. INFO.:
GB 1988-7427 19880328
GB 1988-28833 19881209
JP 1989-503798 19890328
WO 1989-GB319 19890328
US 1989-438404 19891220
US 1993-95856 19930723

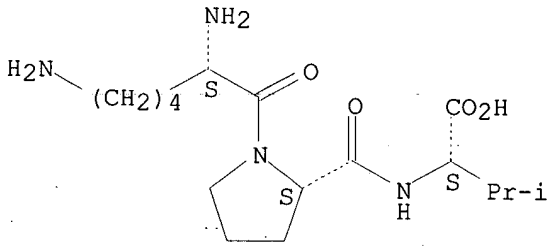
OTHER SOURCE(S): MARPAT 112:139835

AB X-D or L-Pro-Y [I; X = H2N(CH2)4CHNH2CO, H2NC(:NH)NH(CH2)3CHNH2CO; Y = OH, amino acid residue], their C-terminal amides, or their pharmaceutically acceptable salts were prepd. as analgesics by the soln. or solid-phase method. H-Lys-D-Pro-Thr-OH (II) was prepd. by the solid phase method using a BOC-Thr(Bzl)-O-resin (BOC = tert-butoxycarbonyl, Bzl = benzyl), protected amino acids BOC-D-Pro-OH and BOC-Lys(Z)-OH (Z = benzyloxycarbonyl). The writhing test in mice 2 mg II/kg s.c. gave 36% inhibition of response to the acetic acid and 27% to the iloprost. II did not antagonize on-going hyperalgesia induced by carrageenan and by interleukin-1.beta. in rat paw edema tests, which indicated that analgesic effect of II was neither central or non-specific. II at 0.58 mM/L had no effect on prodn. of PGE2 by human blood mononuclear cells whereas 5.9 .mu.M/L indomethacin abolished PGE2 prodn. by these cells, which indicated that II was not an aspirin-like analgesic. A dose of 20 mg indomethacin/kg caused 100% gastric erosion in mice whereas no lesions were obsd. with 32 mg II/kg.

IT **67727-97-3P 125905-17-1P**, H-Lys-D-Pro-Val-OH

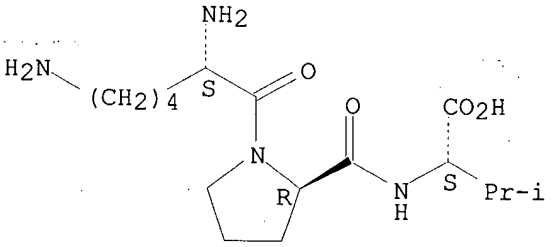
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. of, as analgesic)
RN 67727-97-3 CAPLUS
CN L-Valine, L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 125905-17-1 CAPLUS
CN L-Valine, L-lysyl-D-prolyl- (9CI) (CA INDEX NAME)

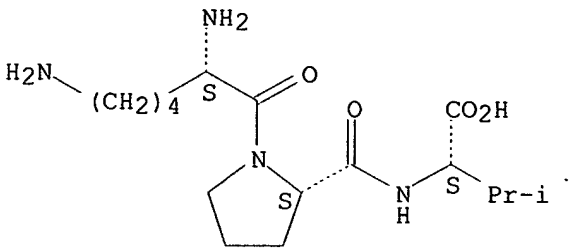
Absolute stereochemistry.



L7 ANSWER 42 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1989:587865 CAPLUS
DOCUMENT NUMBER: 111:187865
TITLE: Antiinflammatory activity of a carboxy-terminal fragment of the neuropeptide .alpha.-MSH
AUTHOR(S): Hiltz, Melanie E.; Lipton, James M.
CORPORATE SOURCE: Southwest. Med. Cent., Univ. Texas, Dallas, TX, 75235, USA
SOURCE: FASEB Journal (1989), 3(11), 2282-4
CODEN: FAJOEC; ISSN: 0892-6638
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Preliminary research has indicated that the C-terminal tripeptide of .alpha.-MSH (Lys-Pro-Val) inhibited increases in vasopermeability, raising the possibility that this portion of the .alpha.-MSH mol. has general antiinflammatory activity. To test this idea, the effects of graded doses of .alpha.-MSH [11-13] on ear swelling induced by picryl chloride in mice were compared with the effects of saline and a large dose of corticosteroid; .alpha.-MSH [11-13] inhibited swelling in a dose-related fashion. This result, together with previous findings, suggests that endogenous circulating .alpha.-MSH and its C-terminal fragments may contribute to modulation of physiol. responses in host defense. If this is true, it may be possible to develop new peptide drugs or mimetics based on the tripeptide that are useful in treating inflammation.
IT **67727-97-3**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antiinflammatory activity of, MSH in relation to)
RN 67727-97-3 CAPLUS
CN L-Valine, L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

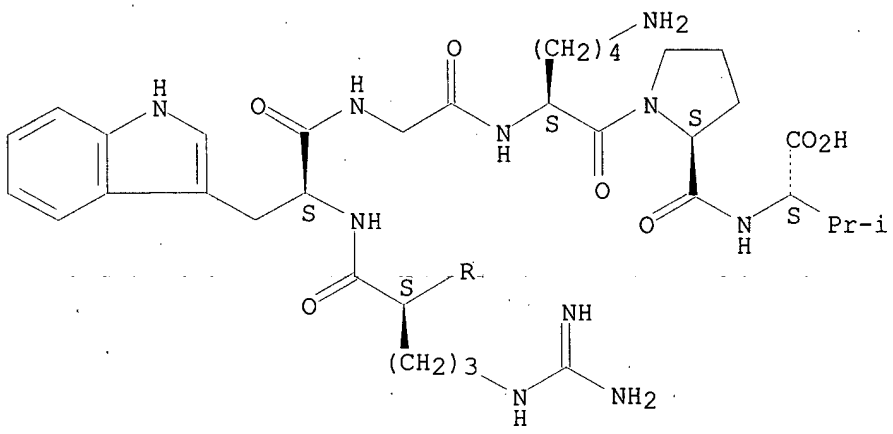


L7 ANSWER 43 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1989:546924 CAPLUS
DOCUMENT NUMBER: 111:146924
TITLE: Conformational behavior of fragments of adrenocorticotropin and their antisense peptides determined by NMR spectroscopy and CD spectropolarimetry
AUTHOR(S): Najem, Elias S.; Corigliano-Murphy, Angela; Ferretti, James A.
CORPORATE SOURCE: Howard Hughes Med. Inst., NHLBI, Bethesda, MD, 20892, USA
SOURCE: FEBS Letters (1989), 250(2), 405-10
CODEN: FEBLAL; ISSN: 0014-5793
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Two-dimensional NMR spectra were used to examine the conformational behavior in methanol and in water soln. of two fragments of ACTH. ACTH(1-24) and ACTH(1-13), as well as their antisense peptides, HTCA and HTCA (12-24). The conformations are extended chains in these solns., both as isolated mols. and when mixed with their antisense complements. The Kd values for binding of antisense peptide to hormone fragments are >1 mM.
IT **22006-64-0**, .alpha.1-13-Corticotropin
RL: PRP (Properties)
(conformation of, antisense peptide binding in relation to)
RN 22006-64-0 CAPLUS
CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

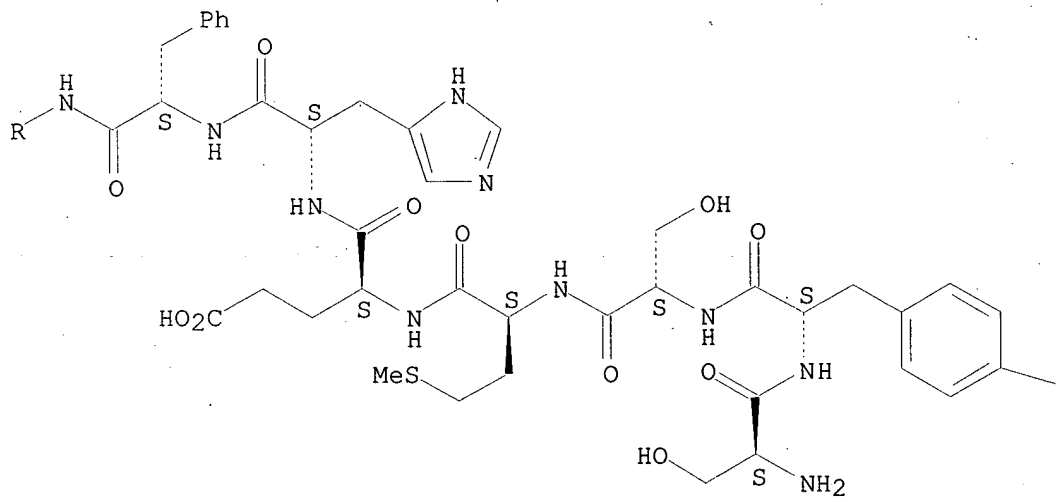
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PAGE 2-B

L7 ANSWER 44 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1989:453613 CAPLUS
DOCUMENT NUMBER: 111:53613
TITLE: A semiempirical model for the electrophoretic mobilities of peptides in free-solution capillary electrophoresis
AUTHOR(S): Grossman, Paul D.; Colburn, Joel C.; Lauer, Henk H.
CORPORATE SOURCE: Appl. Biosyst., Santa Clara, CA, 95050, USA
SOURCE: Analytical Biochemistry (1989), 179(1), 28-33
CODEN: ANBCA2; ISSN: 0003-2697
DOCUMENT TYPE: Journal
LANGUAGE: English

AB An attempt is made to explore the effect of a peptide's size, charge, and hydrophobicity on its electrophoretic mobility .mu. as measured by free-soln. capillary electrophoresis with the aim of developing a semiempirical model which incorporates these effects. The effects of peptide size (which is measured by the no. of amino acids in the polypeptide chain (n)) and charge on .mu. are independently detd. by expt. in a single solvent system and combined to give the relationship .mu. = [5.23 .times. 10-4ln(q + 1)]n0.43 + 2.47 .times. 10-5, (Eq. A.1) where the const. 5.23 .times. 10-4 is postulated to depend on the solvent system used. The form of Eq. [A.1] was confirmed, and the values of the consts. 5.23 .times. 10-4 and 2.47 .times. 10-5 were detd., by measuring the electrophoretic mobilities of 40 peptides 3-39 amino acids and with charge 0.33-14.0. Furthermore, the effect of noncharged neutral amino acids on mobility was investigated and shown to be present, but only as a minor perturbation on the effects of size and charge.

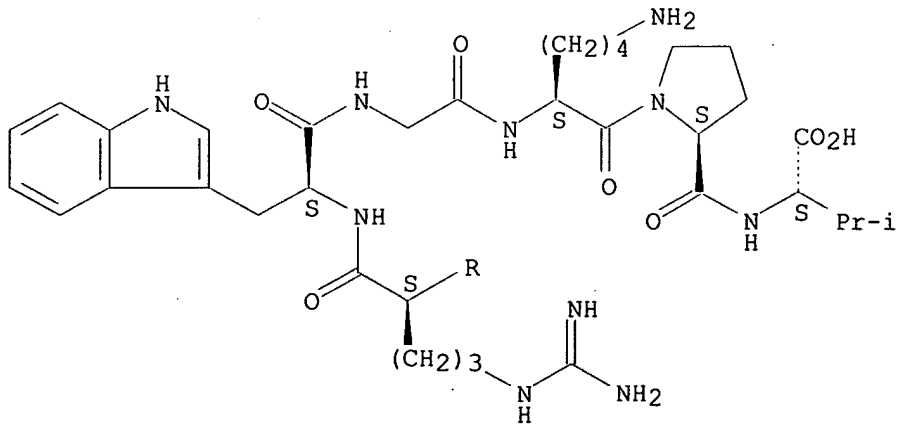
IT **22006-64-0**, .alpha.1-13-Corticotropin
RL: PROC (Process)
(electrophoretic mobility of, in free-soln. capillary electrophoresis, model for)

RN 22006-64-0 CAPLUS
CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

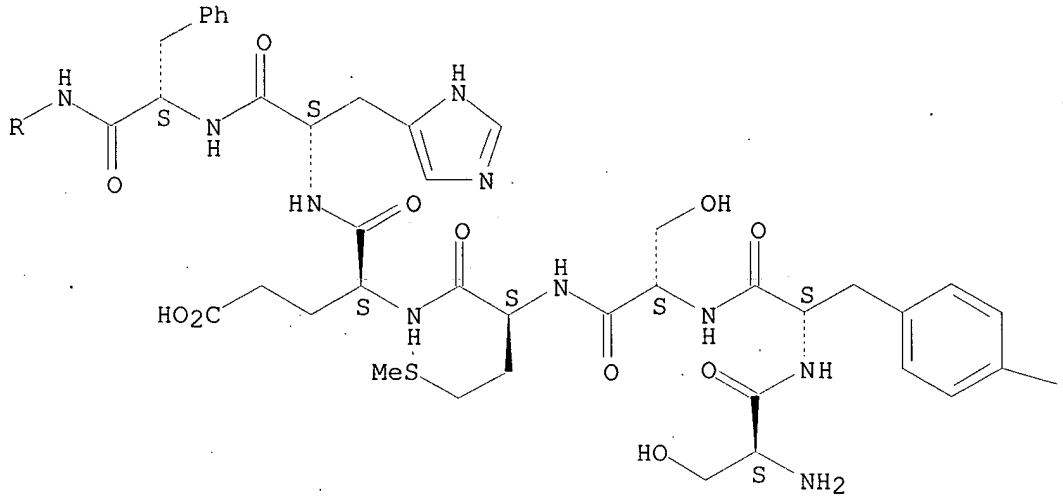
SEQ 1 SYSMEHFRWG KPV

Absolute ~~stereochemistry~~.

PAGE 1-A



PAGE 2-A



PAGE 2-B

OH

L7 ANSWER 45 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1989:450764 CAPLUS
DOCUMENT NUMBER: 111:50764
TITLE: Estradiol and plasminogen activator secretion by cultured rat Sertoli cells in response to melanocyte-stimulating hormones
AUTHOR(S): Boitani, Carla; Farini, Donatella; Canipari, Rita; Bardin, C. Wayne
CORPORATE SOURCE: Inst. Histol. Gen. Embryol., Univ. Rome "La Sapienza", Rome, Italy
SOURCE: Journal of Andrology (1989), 10(3), 202-9
CODEN: JOAND3; ISSN: 0196-3635
DOCUMENT TYPE: Journal
LANGUAGE: English
AB .alpha.-MSH stimulated aromatase activity in Sertoli cell-enriched cultures prepd. from 10-day-old rats and this effect was potentiated by methylisobutylxanthine (MIX). The combination of .alpha.-MSH plus MIX was not as potent as FSH. .alpha.-MSH, des-acetyl-.alpha.-MSH, .beta.-MSH, ACTH(1-13), and ACTH(1-24) stimulated aromatase activity to a similar extent, suggesting that Sertoli cells do not distinguish between the

activities of these peptides. .alpha.-MSH potentiated the action of dibutyryl cAMP and forskolin on Sertoli cell aromatase, but unexpectedly had no effect on the action of either half-maximal or maximal doses of FSH. The regulation of plasminogen activator was examd. next; urokinase was markedly suppressed by FSH in 10-day-old Sertoli cells. Although neither .alpha.-MSH nor MIX alone had an effect on urokinase secretion, in combination they were as effective as FSH. In 10-day-old Sertoli cells each of these peptides had little or no effect on tissue plasminogen activator. Evidently, mols. such as MSH/ACTH peptides modulate Sertoli cell function via cAMP, that there is a differential response depending more upon the Sertoli cell products examd. rather than the peptide tested, and that the magnitude of the responses to .alpha.-MSH and MIX examd. to date do not exceed those produced by FSH.

IT **22006-64-0**, ACTH 1-13
RL: BIOL (Biological study)
(aromatase stimulation by, in Sertoli cells, cAMP mediation of)

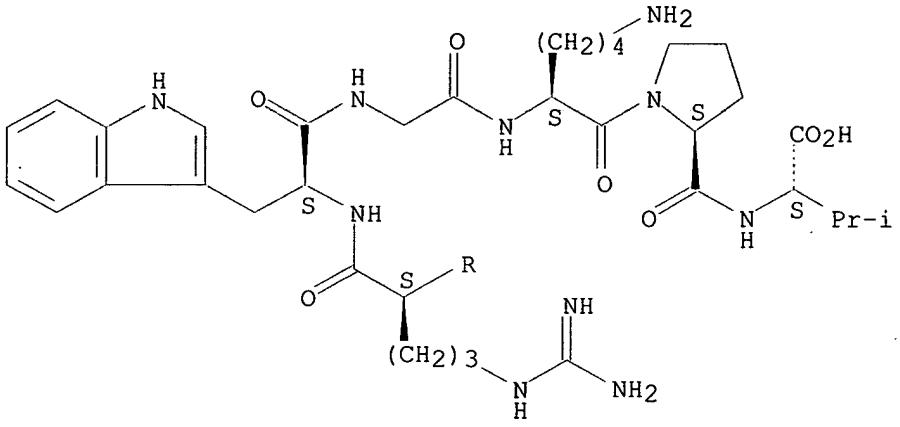
RN 22006-64-0 CAPLUS

CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

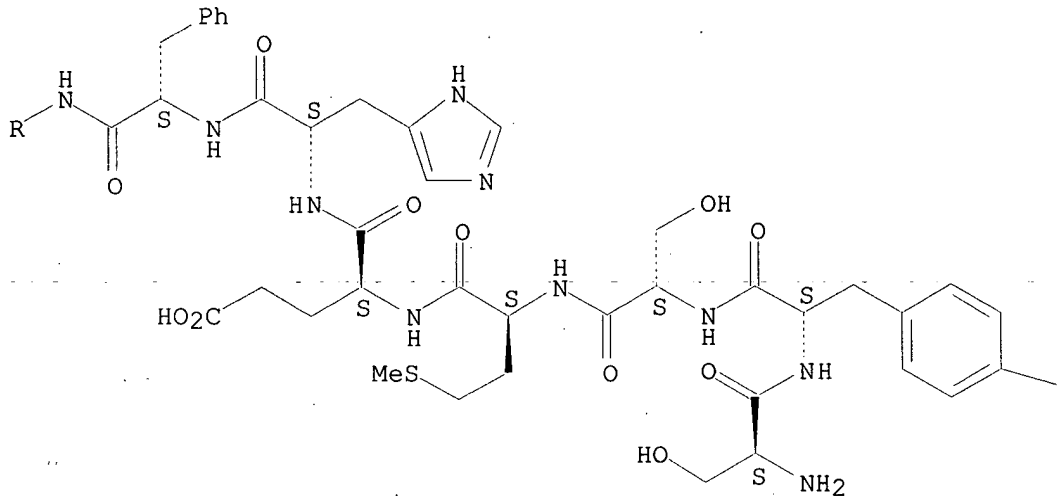
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PAGE 2-B

OH

L7 ANSWER 46 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1989:434681 CAPLUS
DOCUMENT NUMBER: 111:34681
TITLE: Human tissue factor: gene cloning, polypeptide analogs, monoclonal antibodies
INVENTOR(S): Edgington, Thomas S.; Morrissey, James H.
PATENT ASSIGNEE(S): Scripps Clinic and Research Foundation, USA
SOURCE: PCT Int. Appl., 143 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8807543	A1	19881006	WO 1988-US998	19880329
W: AU, DK, FI, JP, NO				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				

US 5110730	A	19920505	US 1987-67103	19870625
EP 309548	A1	19890405	EP 1988-903654	19880329
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
JP 01503438	T2	19891122	JP 1988-503555	19880329
JP 2809415	B2	19981008		
AU 605864	B2	19910124	AU 1988-16274	19880329
AU 8816274	A1	19881102		
ES 2009590	A6	19891001	ES 1988-1019	19880330
FI 8805543	A	19881129	FI 1988-5543	19881129
NO 8805326	A	19890130	NO 1988-5326	19881129
DK 8806668	A	19890131	DK 1988-6668	19881129
FI 9504347	A	19950915	FI 1995-4347	19950915
FI 97813	B	19961115		
FI 97813	C	19970225		
US 6001978	A	19991214	US 1997-844806	19970422

PRIORITY APPLN. INFO.:	US 1987-33047	19870331
	US 1987-67103	19870625
	US 1988-165939	19880309
	WO 1988-US998	19880329
	FI 1988-5543	19881129
	US 1992-880079	19920429

AB The human tissue factor (TF) heavy chain gene is cloned, and human TF binding site polypeptide analogs and monoclonal antibodies to human TF and to the binding site analogs are prepd. Using recombinant DNA technol., the cloning vector pSV-huTFh was constructed. This vector contains the human TF gene under the control of SV40 virus sequences. The vector was transfected into CHO cells. Transfected cells were cultured under conditions compatible with cell growth and expression of the recombinant DNA, and the expressed, sol. human TF was harvested from the culture medium by well-known techniques. The human TF so prepd. displayed biol. activity, i.e., the ability to bind factor VII/VIIa. Monoclonal antibodies to the TF prevented septic shock and death in baboons infused with an LD100 of Escherichia coli.

IT **121357-13-9**
RL: PRP (Properties)
(human tissue factor heavy chain analog)

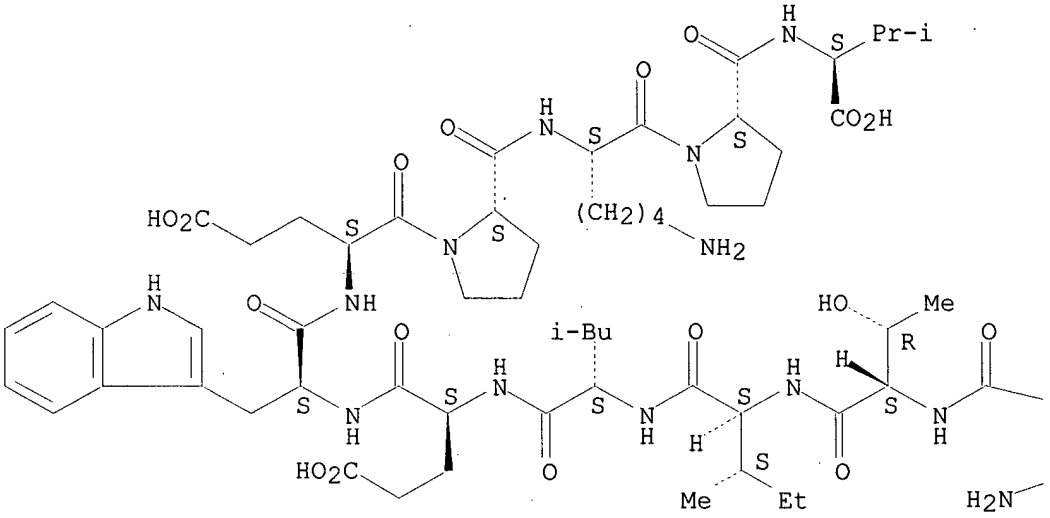
RN 121357-13-9 CAPLUS

CN L-Valine, L-serylglycyl-L-threonyl-L-threonyl-L-asparaginyl-L-threonyl-L-valyl-L-alanyl-L-alanyl-L-tyrosyl-L-asparaginyl-L-leucyl-L-threonyl-L-tryptophyl-L-lysyl-L-seryl-L-threonyl-L-asparaginyl-L-phenylalanyl-L-lysyl-L-threonyl-L-isoleucyl-L-leucyl-L-.alpha.-glutamyl-L-tryptophyl-L-.alpha.-glutamyl-L-prolyl-L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

SEQ 1 SGTTNTVAAY NLTWKSTNFK TILEWEPKPV

Absolute stereochemistry.

PAGE 1-A



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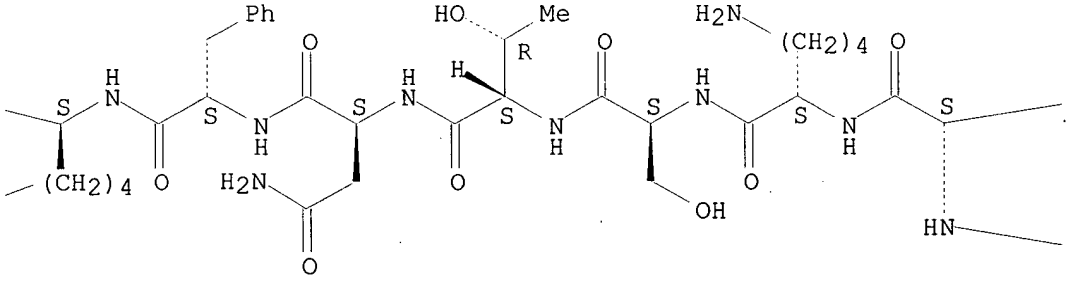

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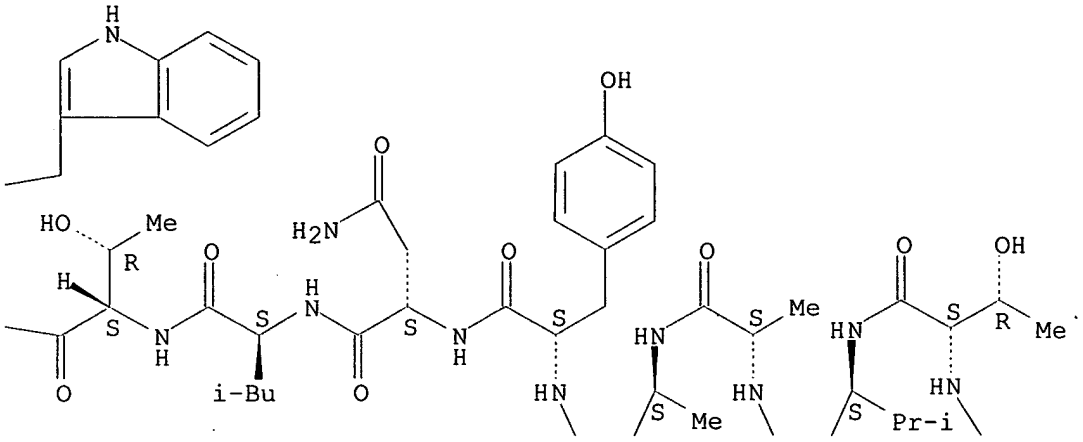
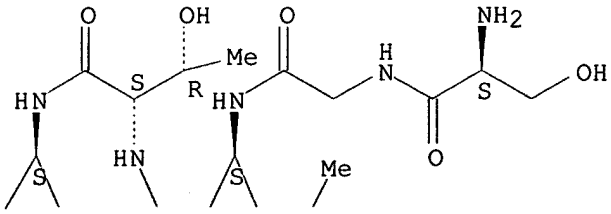
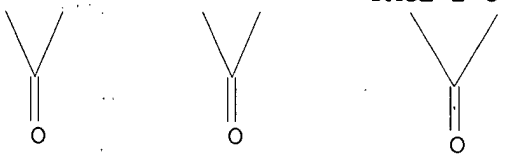


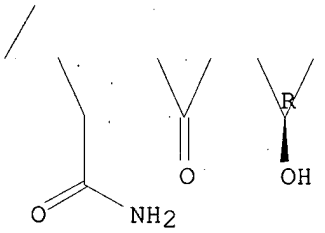
PAGE 1-D



PAGE 2-C



PAGE 2-D



L7 ANSWER 47 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1989:417844 CAPLUS
DOCUMENT NUMBER: 111:17844
TITLE: A fluorescence study of the interaction of ACTH, and some of its fragments, with phospholipid vesicles; correlations between biological activities and affinities for membrane interfaces
AUTHOR(S): Bonmatin, J. M.; Faucon, J. F.; Dufourcq, J.
CORPORATE SOURCE: Cent. Rech. Paul Pascal, CNRS, Talence, 33405, Fr.
SOURCE: Colloque INSERM (1989), 174(Forum Pept., 2nd, 1988), 423-6
CODEN: CINMDE; ISSN: 0768-3154
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The fluorescence of the single tryptophan residue of ACTH peptides was used to monitor their interaction with lipid vesicles, which occurs selectively with neg. charged lipids. About 12 lipid mols define a binding site at interfaces with affinities in the range 106-108 M which strongly vary according of the net charge at the interface. In similar condition the affinities of the different peptides increased in the following sequence: 4-11 < 1-13 < 11-24 .ltoreq. 1-39 < 1-24 < 1-17. All interactions were reversible and affinities decreased on increasing ionic strength or Ca2+ concn. in the mM range. The free energy for interaction with lipids are dominated by an electrostatic component but a hydrophobic one is needed for stabilization. Such features are better accounted by the view that ACTH peptides are adsorbed at membrane interfaces and are weakly penetrating.

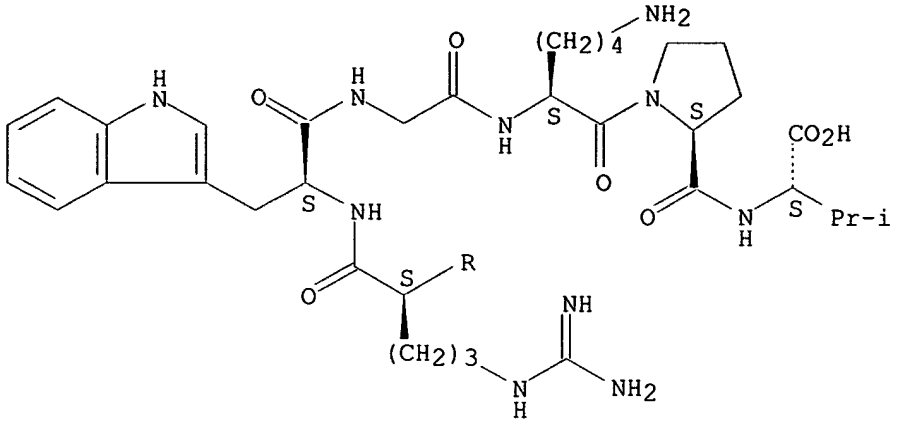
IT **22006-64-0**, ACTH 1-13
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(adsorption of, by phospholipid vesicles, mol. structure in relation to)

RN 22006-64-0 CAPLUS
CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

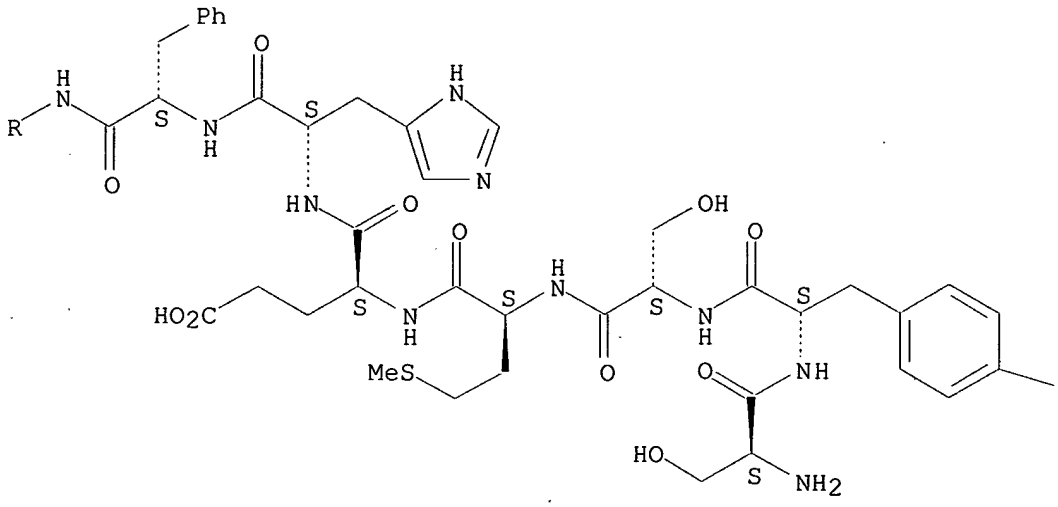
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



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L7 ANSWER 48 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1989:109081 CAPLUS
DOCUMENT NUMBER: 110:109081
TITLE: Antipyretic and anti-inflammatory peptides
INVENTOR(S): Lipton, James M.
PATENT ASSIGNEE(S): University of Texas System, USA
SOURCE: PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8800833	A2	19880211	WO 1987-US1994	19870807
WO 8800833	A3	19880519		
W: AT, AU, BB, BG, BR, CH, DE, DK, FI, GB, HU, JP, KP, KR, LK, LU, MC, MG, MW, NL, NO, RO, SD, SE, SU				
RW: AT, BE, BJ, CF, CG, CH, CM, DE, FR, GA, GB, IT, LU, ML, MR, NL, SE, SN, TD, TG				
AU 8778516	A1	19880224	AU 1987-78516	19870807
AU 604751	B2	19910103		
EP 317573	A1	19890531	EP 1987-905539	19870807
EP 317573	B1	19920422		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
JP 02500361	T2	19900208	JP 1987-505077	19870807
CH 676425	A	19910131	CH 1988-1445	19870807
AT 75145	E	19920515	AT 1987-905539	19870807
CA 1300502	A1	19920512	CA 1987-552067	19871117

PRIORITY APPLN. INFO.:

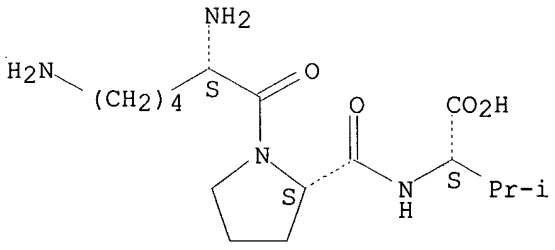
US 1986-894910	19860808
US 1987-76625	19870723
EP 1987-905539	19870807
WO 1987-US1994	19870807

AB Lys-Pro-Val and its N-acylated and amidated derivs. are prepd. for reducing fever and inflammation in mammals. They are esp. effective in combination with Cu salts. Fever was induced in rabbits by i.v. injection of leukocytic pyrogen (produced by incubating leukocytes with Salmonella typhosa endotoxin). The fever was reduced 67% by i.v. injection of 200 mg Lys-Pro-Val (duration of action 1.5 h) and >50% by i.v. injection of 0.5 mg diacetyl-Lys-Pro-Val-NH2 (I) (duration of action .gtoreq.4 h). CuCl2, administered centrally or peripherally, greatly augmented the action of I. The soln.-phase synthesis of di(benzyloxycarbonyl)lysylprolylvaline benzyl ester and its deprotection and conversion to I are described.

IT **67727-97-3P**
RL: PREP (Preparation)
(prepn. of, as antipyretic and inflammation inhibitor)

RN 67727-97-3 CAPLUS
CN L-Valine, L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 49 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1988:566636 CAPLUS
DOCUMENT NUMBER: 109:166636
TITLE: Picosecond fluorescence studies of polypeptide dynamics
AUTHOR(S): Chen, Lin X. Q.; Petrich, Jacob W.; Perico, Angelo; Fleming, Graham R.
CORPORATE SOURCE: James Franck Inst., Univ. Chicago, Chicago, IL, 60637, USA
SOURCE: Proceedings of SPIE-The International Society for Optical Engineering (1988), 909(Time-Resolved Laser Spectrosc. Biochem.), 216-22
CODEN: PSISDG; ISSN: 0277-786X
DOCUMENT TYPE: Journal
LANGUAGE: English

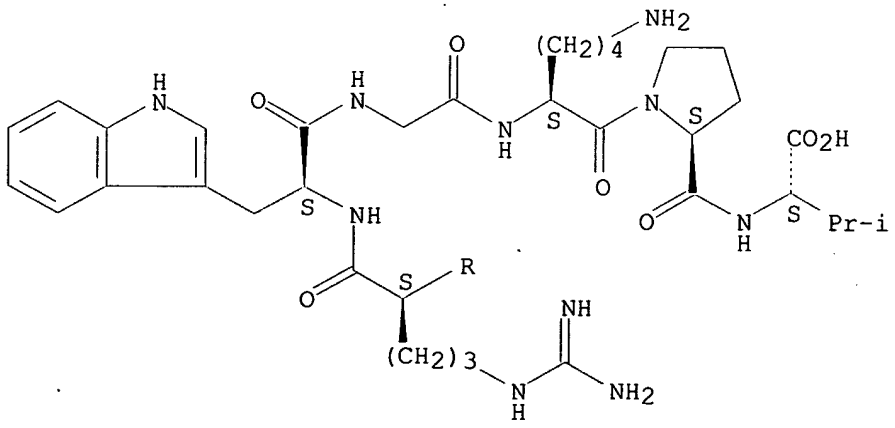
AB Fluorescence anisotropies for single tryptophan-contg. polypeptide hormones ACTH and glucagon, and a series of their fragments are studied. The data are discussed in the context of the theory of A. Perico and M. Guehza (1986) and a persistence length of .apprx.7-10 residues obtained for the mobilities in the 2 hormones. Theory is able to account for chain length and probe location effects very well. The obsd. discrepancies between calcd. and measured anisotropy decays very likely arise from approxns. made in the calcn. and from the limited time resoln. of the expts.

IT **22006-64-0**, ACTH(1-13)
RL: ANST (Analytical study)
(fluorescence anisotropies of, dynamics in relation to)
RN 22006-64-0 CAPLUS
CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

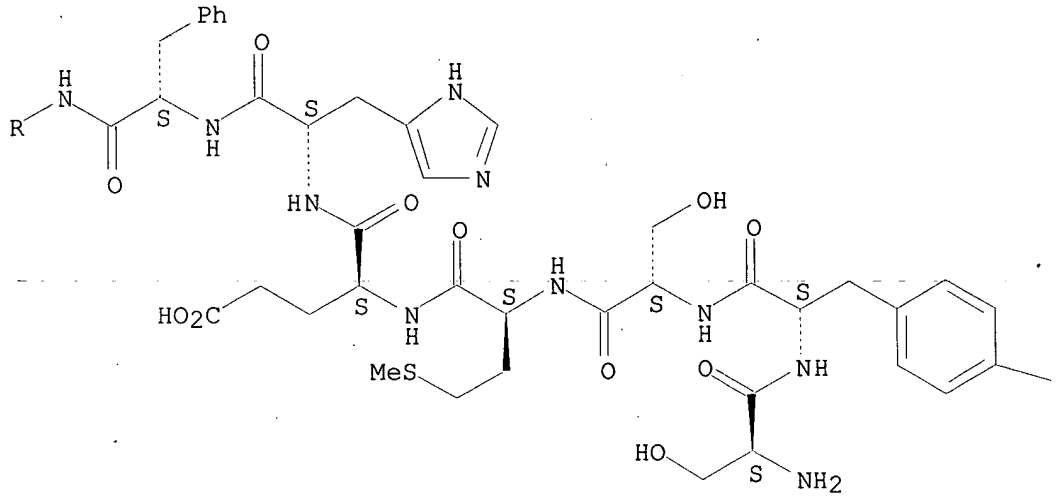
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PAGE 2-B

OH

L7 ANSWER 50 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1988:473902 CAPLUS
DOCUMENT NUMBER: 109:73902
TITLE: Reorientation of tryptophan and simple peptides: onset of internal flexibility and comparison with molecular dynamics simulation
AUTHOR(S): Chen, Lin X. Q.; Engh, Richard A.; Fleming, Graham R.
CORPORATE SOURCE: Dep. Chem., Univ. Chicago, Chicago, IL, 60637, USA
SOURCE: Journal of Physical Chemistry (1988), 92(16), 4811-16
CODEN: JPCHAX; ISSN: 0022-3654
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Absorption anisotropy decays were recorded for tryptophan and a series of dipeptides with a time resoln. of less than 1 ps. Fluorescence anisotropies for tryptophan and several of its derivs. were also recorded. Polar interactions retard the reorientational motion significantly. Mol. dynamics simulations of the reorientation, using SPC model water, give reorientation times about 4 times shorter than the exptl. values. By studying fragments of the hormone ACTH, internal flexibility of the peptide becomes detectable at a length of 6 residues, implying that the

motion of longer peptides can be modeled by considering the motion of units larger than single residues.

IT **22006-64-0**
RL: PRP (Properties)
(calcd. vol. of, by Archimides method, reorientation time in relation to)

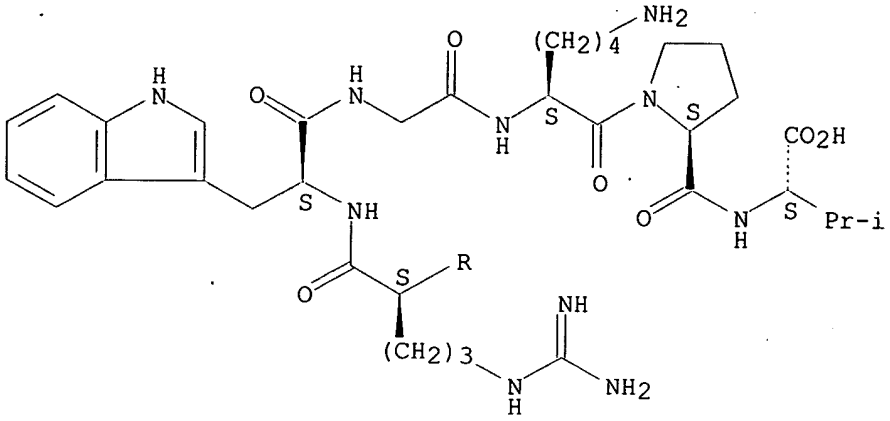
RN 22006-64-0 CAPLUS

CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



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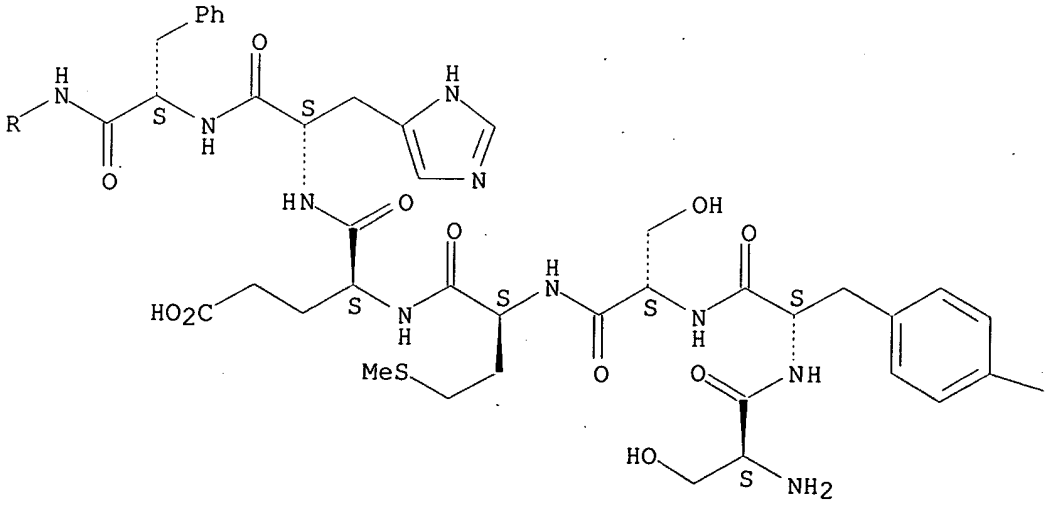

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—OH

L7 ANSWER 51 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1988:466889 CAPLUS
DOCUMENT NUMBER: 109:66889
TITLE: ACTH fragments for the treatment of shock and respiratory and cardiovascular insufficiency
INVENTOR(S): Bertolini, Alfio
PATENT ASSIGNEE(S): Italy
SOURCE: Eur. Pat. Appl., 7 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 232697	A2	19870819	EP 1987-100016	19870102
EP 232697	A3	19900523		
EP 232697	B1	19930728		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
US 4794104	A	19881227	US 1987-183	19870102
AT 91900	E	19930815	AT 1987-100016	19870102
ES 2058065	T3	19941101	ES 1987-100016	19870102
JP 62215531	A2	19870922	JP 1987-1574	19870107
ZA 8700246	A	19870930	ZA 1987-246	19870114
PRIORITY APPLN. INFO.:			IT 1986-19086	19860115
			EP 1987-100016	19870102

AB The polypeptides selected from a) a fragment of ACTH (1-39) of formula ACTH (x-y) [X = 1-5, Y = 10-39, not ACTH (1-24)]; b) the N-acyl and N,O-diacyl derivs. of ACTH (x-y); or c) 4-norleucine-7-D-phenylalanine-.alpha.-MSH are used for treatment of shock and respiratory or cardiovascular insufficiencies. Rats were bled of 2-2.5 mL/100 g blood (.gtoreq.50% blood vol.) and immediately administered bolus 160 .mu.g/kg i.v. ACTH (1-16). Prior to bleeding, mean arterial pressure was 78.25 .+-. 12.46 mmHg; immediately after bleeding, 15.50 .+-. 2.53; and 15-30 min after treatment, 54.50 .+-. 2.02; and no rats were dead 120 min after treatment. For control rats, blood pressure was essentially unchanged 30 min after bleeding, and all the rats were dead 120 min after treatment.

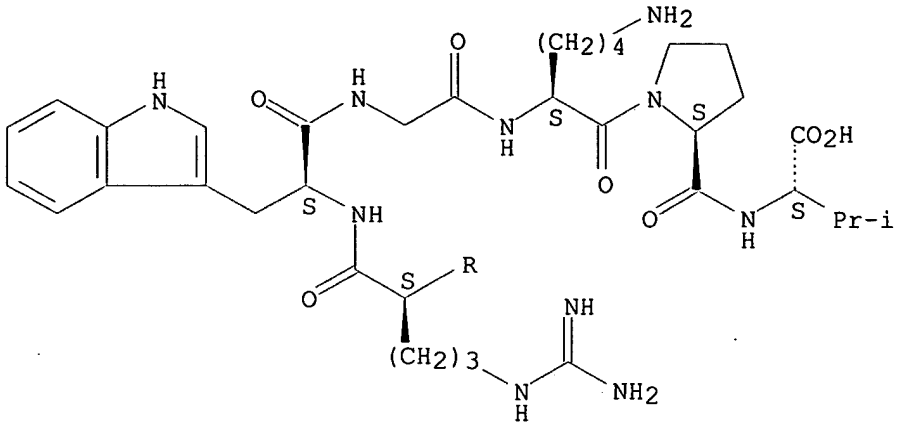
IT **22006-64-0**, ACTH (1-13) **22006-64-0D**, ACTH (1-13), N-acylated and N,O-diacylated derivs. **115594-30-4** **115594-30-4D**, N-acylated and N,O-diacylated derivs.
RL: BIOL (Biological study)
(treatment of shock and respiratory and cardiovascular insufficiency

by)
RN 22006-64-0 CAPLUS
CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



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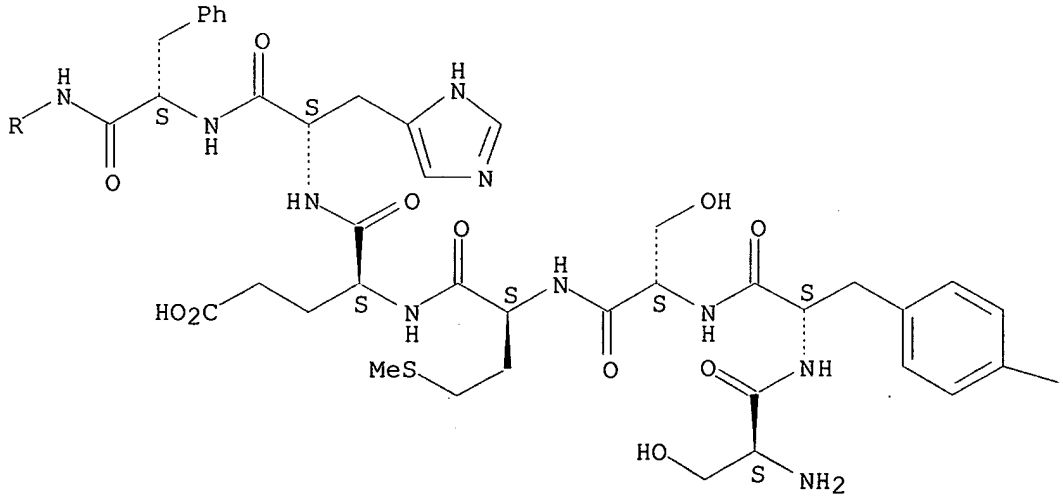


PAGE 2-B

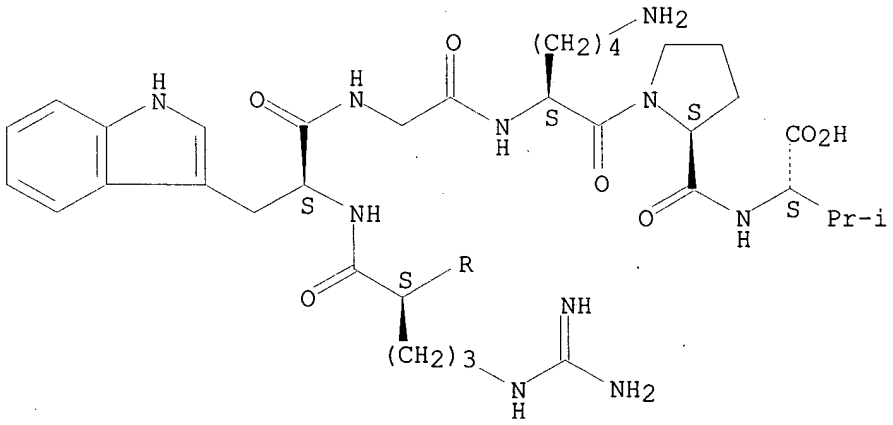
—OH

RN 22006-64-0 CAPLUS
CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

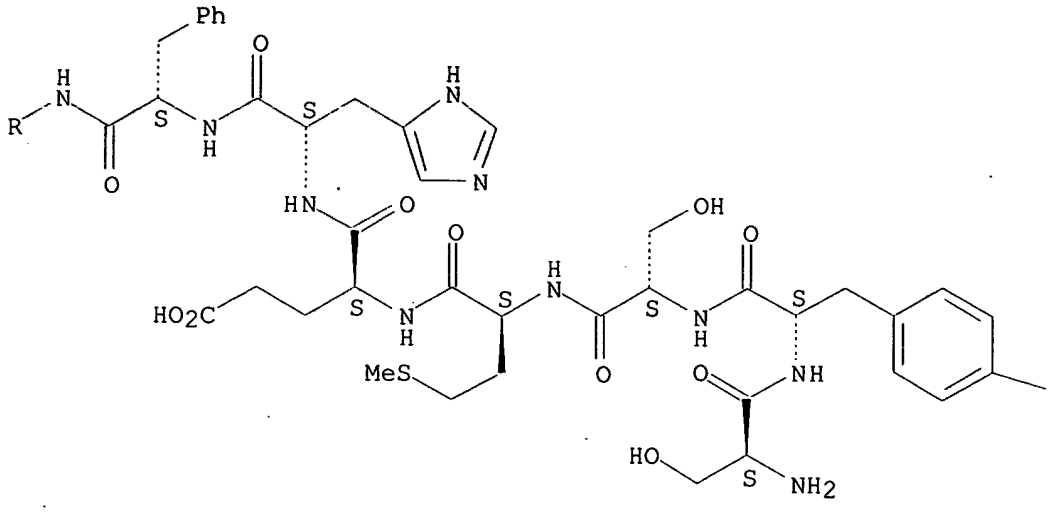
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PAGE 2-B

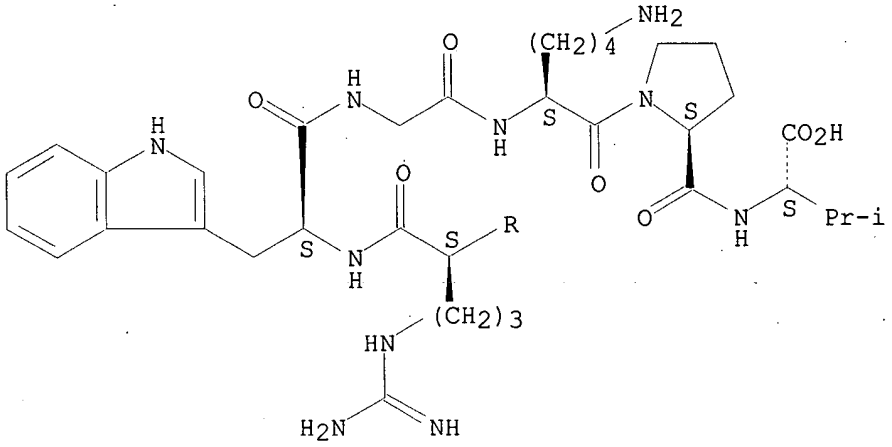
OH

RN 115594-30-4 CAPLUS
CN L-Valine, N-[1-[N2-[N-[N-[N2-[N-(N-L-.alpha.-glutamyl-L-histidyl)-L-phenylalanyl]-L-arginyl]-L-tryptophyl]glycyl]-L-lysyl]-L-prolyl]- (9CI) (CA INDEX NAME)

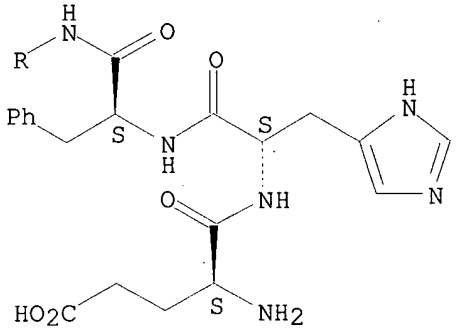
SEQ 1 EHFRWGKPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

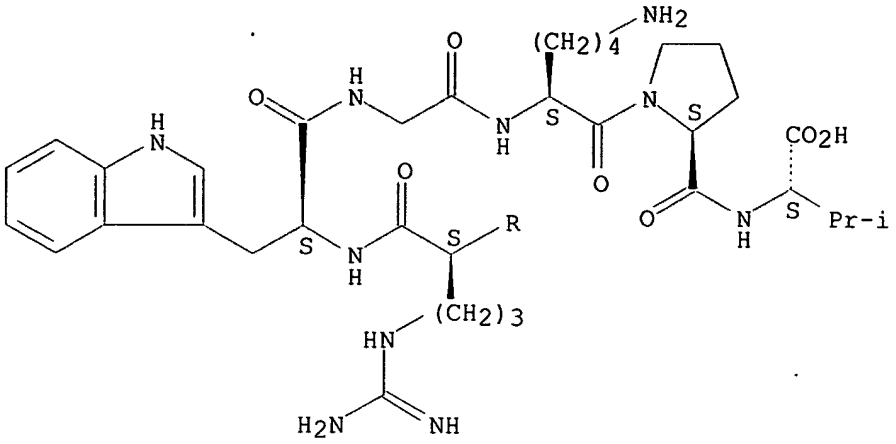


RN 115594-30-4 CAPLUS
CN L-Valine, N-[1-[N2-[N-[N-[N2-[N-(N-L-.alpha.-glutamyl-L-histidyl)-L-phenylalanyl]-L-arginyl]-L-tryptophyl]glycyl]-L-lysyl]-L-prolyl]- (9CI) (CA INDEX NAME)

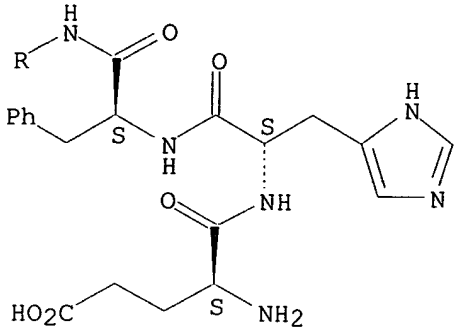
SEQ 1 EHFRWGKPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



L7 ANSWER 52 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1988:436225 CAPLUS
DOCUMENT NUMBER: 109:36225
TITLE: Functional and biochemical parameters of peptide antigen presentation
AUTHOR(S): Thomas, David W.; Solvay, Maxine J.; Hadley, Gregg; Betancourt, Soraya; Jun, Susie; Nairn, Roderick
CORPORATE SOURCE: Med. Sch., Univ. Michigan, Ann Arbor, MI, 48109, USA
SOURCE: Cellular Immunology (1988), 113(2), 387-403
CODEN: CLIMB8; ISSN: 0008-8749
DOCUMENT TYPE: Journal
LANGUAGE: English

AB To understand the mechanism by which peptide antigens are processed and presented to T cells, the T-cell response was examd. to the 13-amino-acid peptide, .alpha.-MSH (.alpha.-MSH). To det. the fine specificity of T-cell recognition, T cells specific for .alpha.-MSH, and genetically restricted by I-Ab/d, were challenged with different .alpha.-MSH analogs and homologs. Intact .alpha.-MSH, including the blocked N and C termini of the native mol., was required for T-cell responsiveness. Antigen-presenting cells (APC) could be briefly pulsed with .alpha.-MSH and then present the .alpha.-MSH antigenic determinant to T cells, indicating that the relevant antigen was retained by the APC. APC stimulatory capacity was dramatically reduced by aldehyde treatment of the APC, or by pulsing the APC with .alpha.-MSH at low temp. Efficient

.alpha.-MSH pulsing was also impaired by treatment of the APC with the carboxylic ionophore, monensin, but not by the lysosomotropic agents chloroquine and methylamine. In addn., isolated APC plasma membranes added to the T cells in the presence of sol. .alpha.-MSH were not stimulatory. However, plasma membranes isolated from APC that had been previously pulsed with .alpha.-MSH retained stimulatory activity for T-cell responses. The only detectable .alpha.-MSH contained in these pulsed APC membranes was in an acid-stable complex of higher mol. wt. than native peptide. The amt. of .alpha.-MSH detected in the cellular membrane fraction isolated by d. gradient sedimentation was also reduced by treatments that reduced the APC stimulatory capacity, such as pulsing at low temp. or in the presence of monensin. Thus, processing of .alpha.-MSH is unlike that heretofore described for other peptide antigens and seems to involve APC handling to form the stimulatory moiety presented on the APC surface.

IT **10466-28-1**
RL: PROC (Process)
(as peptide antigen, presentation of, to T-lymphocyte, properties of)

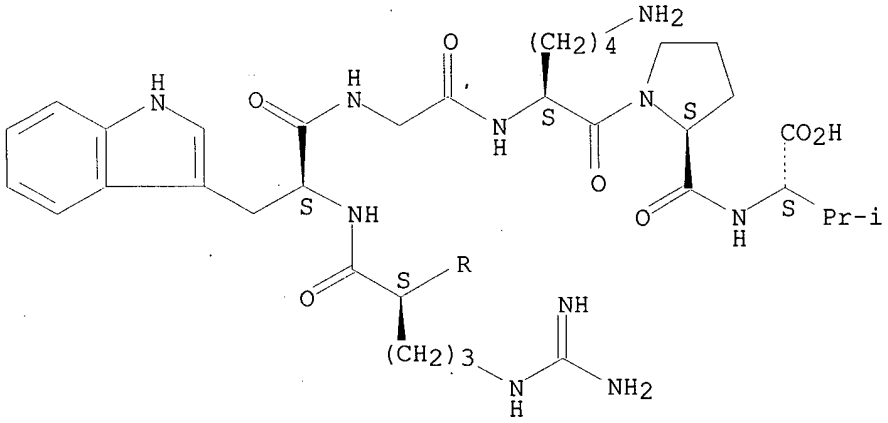
RN 10466-28-1 CAPLUS
CN .alpha.-Melanotropin (swine), 13-L-valine- (9CI) (CA INDEX NAME)

NTE modified

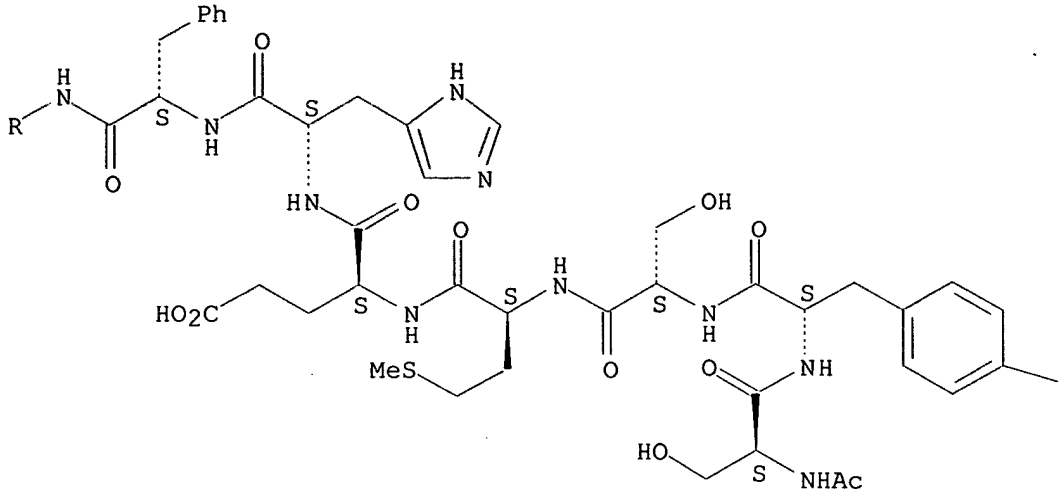
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PAGE 2-B

OH

L7 ANSWER 53 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1988:106625 CAPLUS
DOCUMENT NUMBER: 108:106625
TITLE: ACTH and adrenal aerobic glycolysis. II: Effects of aminoterminal peptide fragments on lactic acid and steroid production by mouse adrenocortical cells
AUTHOR(S): Hinson, J.; Birmingham, M. K.
CORPORATE SOURCE: Dep. Biochem., McGill Univ., Montreal, QC, H3A 1A1, Can.
SOURCE: Journal of Endocrinology (1987), 115(1), 71-6
CODEN: JOENAK; ISSN: 0022-0795
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The effects of shortening the ACTH mol. from either end of the peptide chain on adrenal glycolysis and steroidogenesis were examd. in mouse adrenal cell suspensions. Shortening the (1-24) sequence to (1-17), (1-16), and (1-14), thereby interfering with the basic tetrapeptide (15-18) assigned to the address message, progressively reduced both glycolytic and steroidogenic potencies by 4, 6, and 10 orders of magnitude, resp., without impairing the capacity for maximal excitation.

The glycolytic potency of the (1-18) sequence, which was amidated at the C-terminal, equaled that of ACTH (1-24), but the steroidogenic potency was reduced by an order of magnitude. The (1-13) sequence of .alpha.-MSH, which contains substitutions at both terminals, had glycolytic and steroidogenic potencies intermediate between those of ACTH (1-16) and ACTH (1-17). Deletion of Ser1,Tyr2 from ACTH (1-18)-NH2 reduced both potencies by an order of magnitude. ACTH(11-24) and (7-38) were inactive or inhibitory. The capacity for excitation was further examd. by comparing responses to peptide fragments (1-4), (1-10), (1-13), (4-10), (4-11), (5-10), (5-14), (7-13), and (11-24) at a concn. of 1 mM. All fragments, excepting (1-4), (5-10), and (11-24) were active. The activities of fragments (5-14) and (7-13), as opposed to (5-10), suggest that the requirements for methionine in position 4 may be replaced by the (11-13) tripeptide. The relative glycolytic responses of fragments contg. the (11-13) sequence exceeded the steroidogenic responses, suggesting that the (11-13) sequence may be specifically implicated in a receptor involved in glycolysis. With this exception, the functional domains within the ACTH mol. responsible for excitation, potentiation, and affinity appear to be in similar locations for both evocation of glycolysis and steroidogenesis, judging from the parallel responses to redn. in chain length.

IT **22006-64-0**, ACTH 1-13 **33440-05-0**
RL: BIOL (Biological study)
(corticosteroid formation and glycolysis response to, in adrenal cortex, mol. structure in relation to)

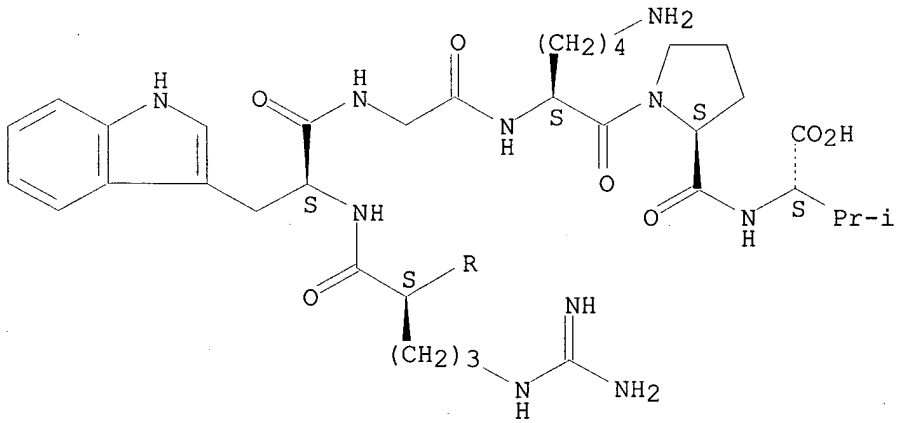
RN 22006-64-0 CAPLUS

CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

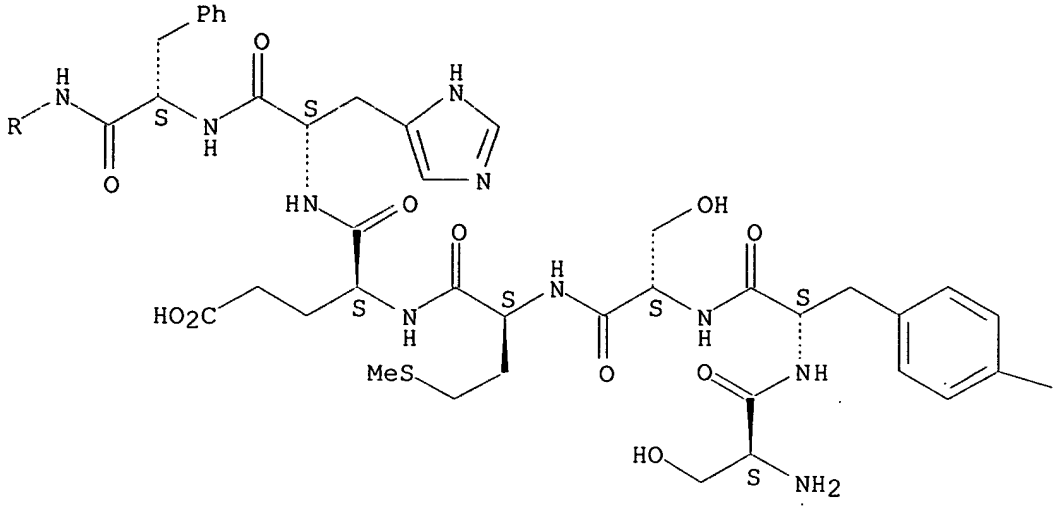
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



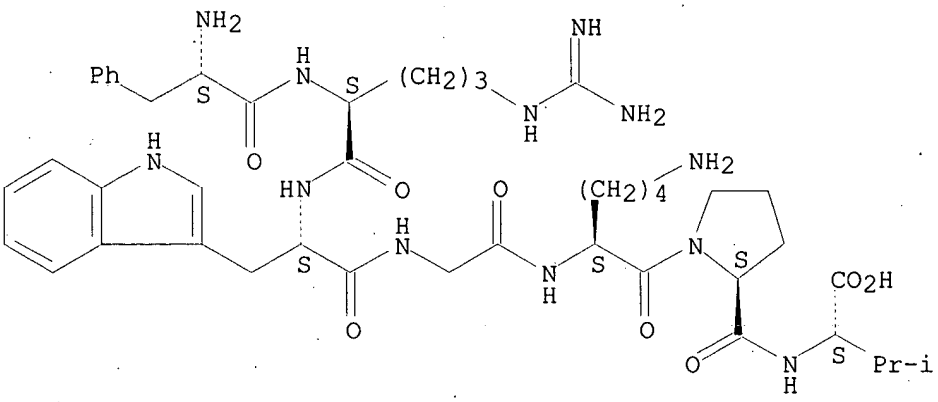
PAGE 2-B

—OH

RN 33440-05-0 CAPLUS
CN L-Valine, L-phenylalanyl-L-arginyl-L-tryptophylglycyl-L-lysyl-L-prolyl-
(9CI) (CA INDEX NAME)

SEQ 1 FRWGKPV

Absolute stereochemistry.



L7 ANSWER 54 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1987:591148 CAPLUS
DOCUMENT NUMBER: 107:191148
TITLE: Picosecond fluorescence studies of polypeptide dynamics: fluorescence anisotropies and lifetimes
AUTHOR(S): Chen, Lin X. Q.; Petrich, Jacob W.; Fleming, Graham R.; Perico, Angelo
CORPORATE SOURCE: James Franck Inst., Univ. Chicago, Chicago, IL, 60637, USA
SOURCE: Chemical Physics Letters (1987), 139(1), 55-61
CODEN: CHPLBC; ISSN: 0009-2614
DOCUMENT TYPE: Journal
LANGUAGE: English

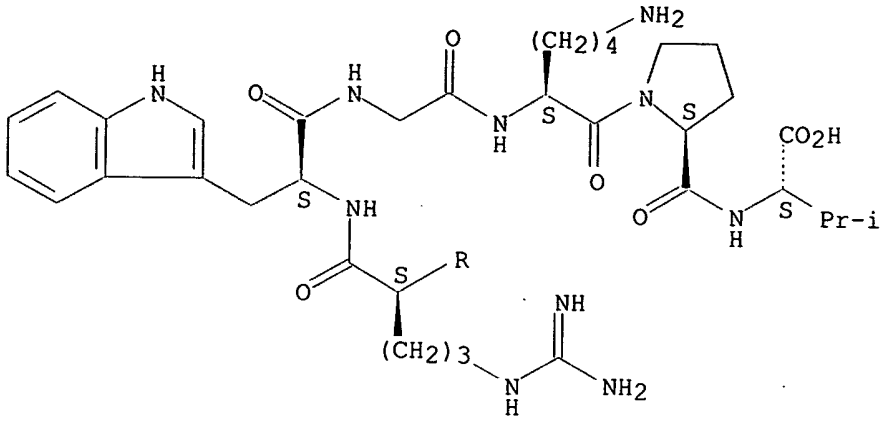
AB Fluorescence lifetimes and anisotropies for single tryptophan-contg. polypeptide hormones ACTH and glucagon, and a series of their fragments are reported. The anisotropy data are discussed in the context of the theory of A. Perico and M. Guenza (1986). A persistence length of .apprx.7-10 residues is obtained for the mobilities in the 2 hormones. The theory is able to account for chain length and probe location effects, but the calcd. time dependence of the anisotropy does not fit the exptl. curve well at short times.

IT **22006-64-0**, ACTH(1-13)
RL: PRP (Properties)
(fluorescence of, anisotropy and lifetimes of, dynamics in relation to)
RN 22006-64-0 CAPLUS
CN .alpha.-1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

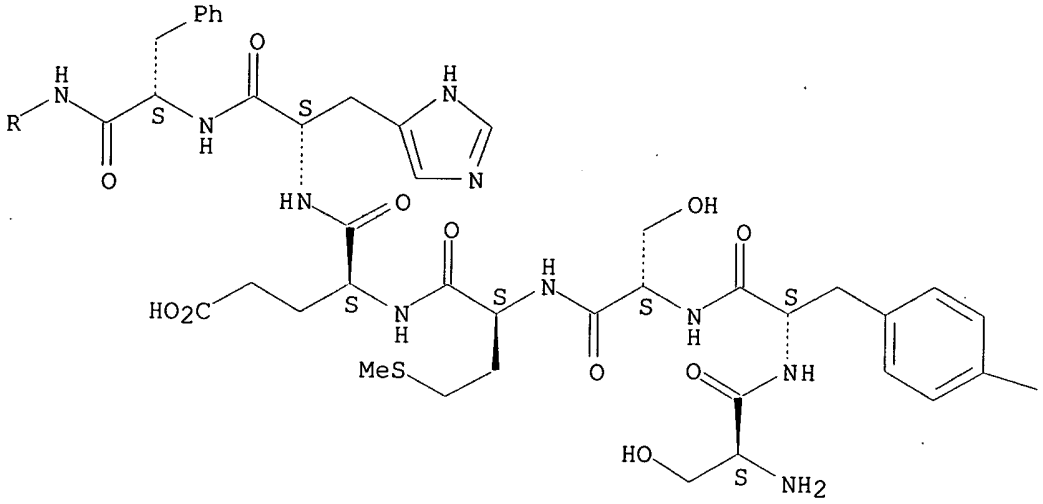
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



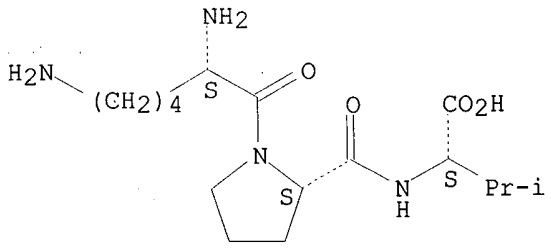
PAGE 2-A



PAGE 2-B

L7 ANSWER 55 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1987:490441 CAPLUS
DOCUMENT NUMBER: 107:90441
TITLE: Effect of ACTH/.alpha.-MSH fragments upon the corticosteroid production of cells of the adrenal cortex
AUTHOR(S): S. Szalay, Katalin; De Wied, D.; Stark, Ervin; Folly, Gabor
CORPORATE SOURCE: Kiserleti Orvostud. Kut. Intez., MTA, Budapest, H-1450, Hung.
SOURCE: Kemiai Kozlemenyek (1986), 65(1), 60-6
CODEN: KEKOAS; ISSN: 0022-9814
DOCUMENT TYPE: Journal
LANGUAGE: Hungarian
AB The steroidogenic action of ACTH/.alpha.-MSH fragments was studied on isolated zona glomerulosa and zona fasciculata cells dispersed by collagenase. ACTH-(4-7), ACTH-(6-10), ACTH-(4-10), and ACTH-(11-13) stimulated corticosterone prodn. of the zona fasciculata and aldosterone prodn. of the zona glomerulosa cells. ACTH-(7-10) was ineffective. ACTH-(4-7) appeared to be the most potent peptide of the tested fragments. None of the fragments affected the steroidogenic action of ACTH-(1-39). Similar to the melanotropic effect of .alpha.-MSH, 2 message sequences for adrenocortical stimulation may exist in the .alpha.-MSH part of the ACTH mol.
IT **67727-97-3**, ACTH-(11-13)
RL: BIOL (Biological study)
(aldosterone and corticosterone formation response to)
RN 67727-97-3 CAPLUS
CN L-Valine, L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 56 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1987:169218 CAPLUS
DOCUMENT NUMBER: 106:169218
TITLE: Lipolytic potency of proopiomelanocorticotropin peptides in vitro
AUTHOR(S): Richter, W. O.; Schwandt, P.
CORPORATE SOURCE: Med. Dep. II, Univ. Munich, Munich, D-8000/70, Fed. Rep. Ger.
SOURCE: Neuropeptides (Edinburgh, United Kingdom) (1987), 9(1), 59-74
CODEN: NRPPDD; ISSN: 0143-4179
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Four lipolytic active centers were localized in proopiomelanocorticotropin (POMC) [66796-54-1]: (1) in the N-terminal part of POMC (tryptophan-rich peptide), (2) in the N-terminal part of ACTH, (3) in the middle portion of .beta.-lipotropin and (4) in the C-terminal part of .beta.-lipoptropin. The weak lipolytic activity of the tryptophan-rich peptide is not mediated

by its 2 partial sequences .gamma.-MSH [72711-43-4] and .delta.-MSH [78206-99-2]. The minimal amino acid sequence for obtaining lipolysis from the N-terminal part of ACTH was ACTH 4-10 [4037-01-8]. Lengthening of this amino acid sequence on the N- or C-terminus resulted in a strong increase of lipolytic potency. The minimal effective sequence from the middle portion of .beta.-lipotropin was located in the amino acid residues 47-53 which are identical to ACTH 4-10. Addnl. amino acids on the N- and C-terminus (.beta.-lipotropinp 41-58 [19941-13-0] and human .beta.-lipotropin 35-56 [17908-57-5]) lead also to increased lipolytic activity. The 4th center of POMC resides in the C-terminal part of .beta.-lipotropin (residues 78-91) because sequences from the N-terminal part of porcine .beta.-lipotropin 61-91 [60149-45-3] were ineffective. The order of potency of POMC peptides esp. in respect to the minimal effective concn. was ACTH 1-13 (.alpha.-MSH) [**22006-64-0**] > porcine .beta.-lipotropin [39302-20-0] > ACTH 1-39 [11137-42-1] ACTH 1-10 [2791-05-1] > .beta.-lipotropinp 61-91.

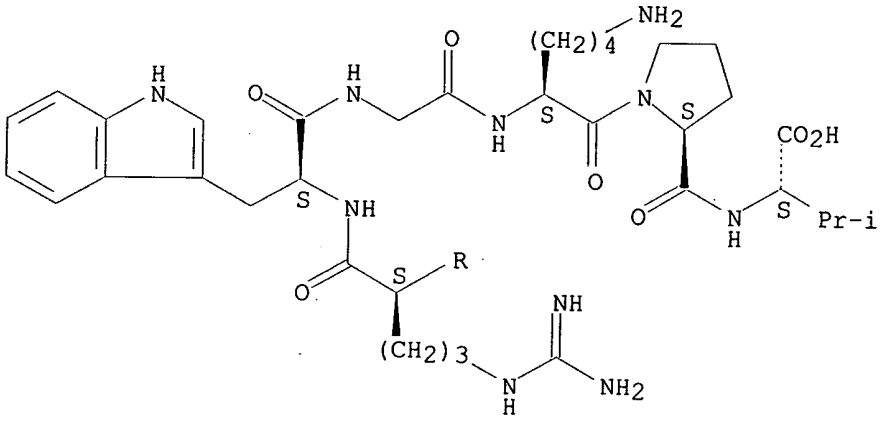
IT **22006-64-0**
RL: PROC (Process)
(lipolytic action of, mol. structure in relation to)

RN 22006-64-0 CAPLUS
CN .alpha.-1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

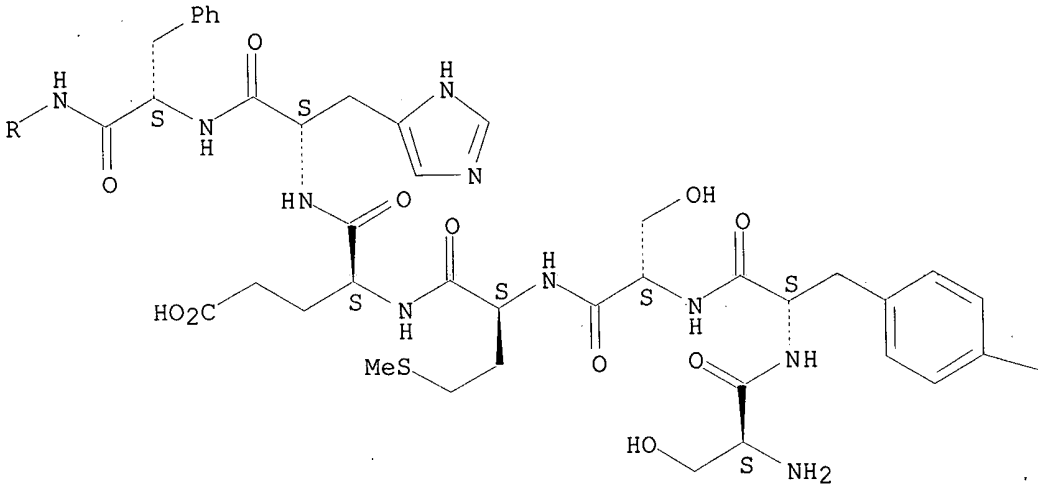
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PAGE 2-B

OH

L7 ANSWER 57 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1987:100583 CAPLUS
DOCUMENT NUMBER: 106:100583
TITLE: Generation of idiotypic and anti-idiotypic antibodies by immunization with peptides encoded by complementary RNA: a possible molecular basis for the network theory
AUTHOR(S): Smith, Lawrence R.; Bost, Kenneth L.; Blalock, J. Edwin
CORPORATE SOURCE: Dep. Physiol. Biophys., Univ. Alabama, Birmingham, AL, 35294, USA
SOURCE: Journal of Immunology (1987), 138(1), 7-9
CODEN: JOIMA3; ISSN: 0022-1767
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A subpopulation of antibodies to ACTH(1-13) bound to antibodies to ACTH(1-24). Evidence from RIAs for ACTH suggest that some structural determinant on the antibody to ACTH(1-24) which the authors believe to be an ACTH-resembling idiotope, behaved in an ACTH-like manner by competing with radiolabeled ACTH for anti-ACTH antibody binding sites. These

findings support a mol. basis for the network theory, that is the binding sites of interacting peptides and proteins are encoded by complementary segments of DNA.

IT **22006-64-0**, ACTH 1-13
RL: BIOL (Biological study)
(antibodies to, antibodies to ACTH peptide interaction with)

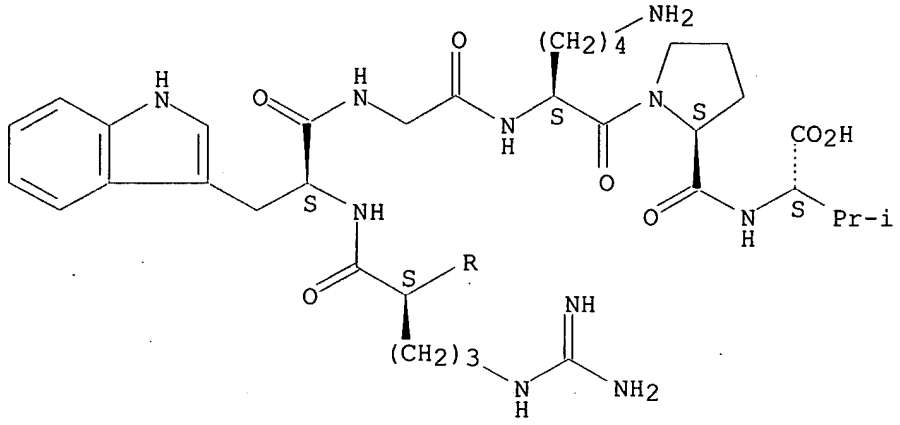
RN 22006-64-0 CAPLUS

CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

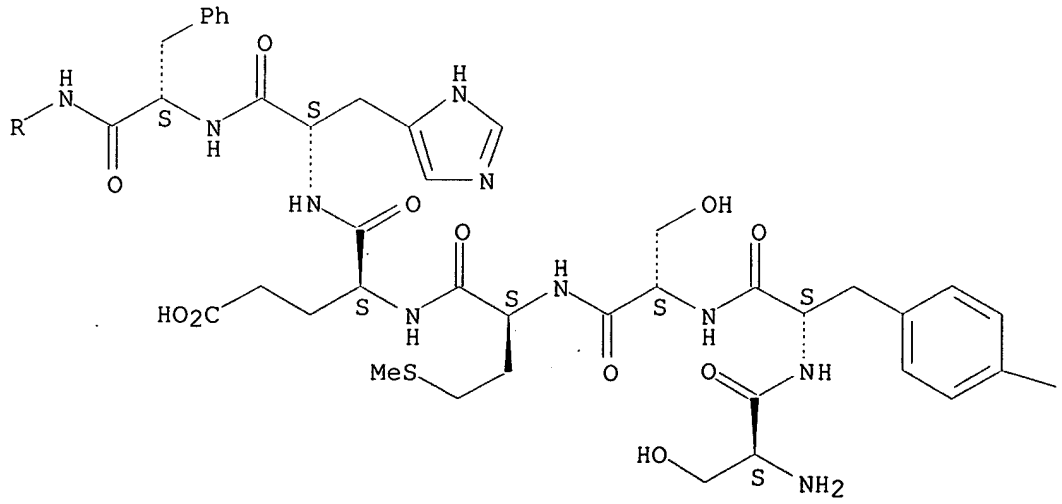
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PAGE 2-B

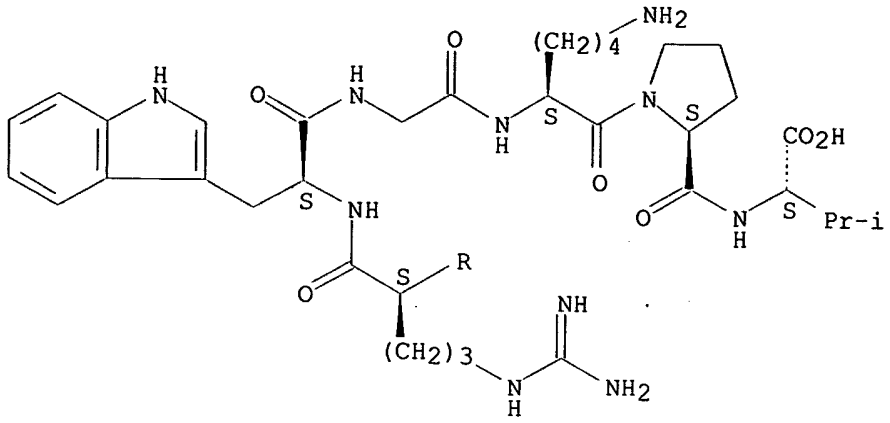
OH

L7 ANSWER 58 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1987:96335 CAPLUS
DOCUMENT NUMBER: 106:96335
TITLE: Electroencephalographic, behavioral and autonomic effects of various ACTH fragments in rabbits
AUTHOR(S): Maurelli, M.; Marchioni, E.; Savoldi, F.; Tartara, A.
CORPORATE SOURCE: Ist. Neurol. "C. Mondino", Pavia, Italy
SOURCE: Farmaco, Edizione Scientifica (1987), 42(1), 33-41
CODEN: FRPSAX; ISSN: 0430-0920
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The effect of the 1-24 [16960-16-0], 1-17 [7266-47-9], 1-13 [**22006-64-0**], 4-11 [67224-41-3], 1-4-ACTH [19405-50-6] fragments on cortical and hippocampal elec. activity, behavior, heart rate, and rectal temp. of nonanesthetized rabbits was studied. All the fragments were active in modifying cerebral elec. activity of both structures. Animal behavior was not significantly modified. On the contrary, changes in rectal temp. were obsd. in all the animals treated. The hypothermal effect seemed to be related to the 11-13 amino acid sequence.
IT **22006-64-0**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(biol. activity of, structure in relation to)
RN 22006-64-0 CAPLUS
CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



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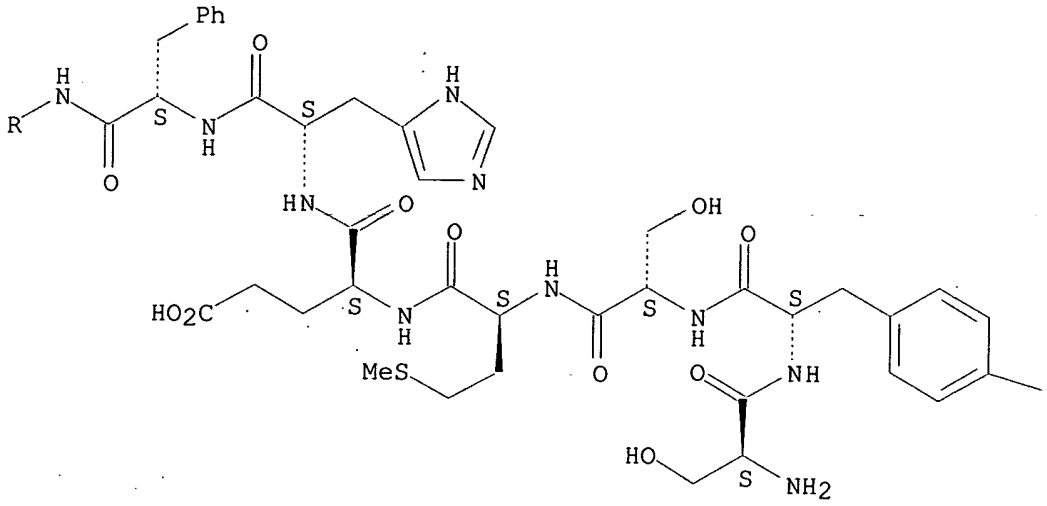


PAGE 2-B

L7 ANSWER 59 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1986:603447 CAPLUS
DOCUMENT NUMBER: 105:203447
TITLE: The effects of pro-opiomelanocortin peptides on cyclic AMP and tyrosinase in melanoma cells
AUTHOR(S): Farah, John M., Jr.; Bishop, John F.; Nguyen, Hung Q.; O'Donohue, Thomas L.
CORPORATE SOURCE: Exp. Ther. Branch, Natl. Inst. Neurol. Commun. Disord. Stroke, Bethesda, MD, 20892, USA
SOURCE: Peptides (New York, NY, United States) (1986), 7(3), 437-41
CODEN: PPTDD5; ISSN: 0196-9781
DOCUMENT TYPE: Journal
LANGUAGE: English

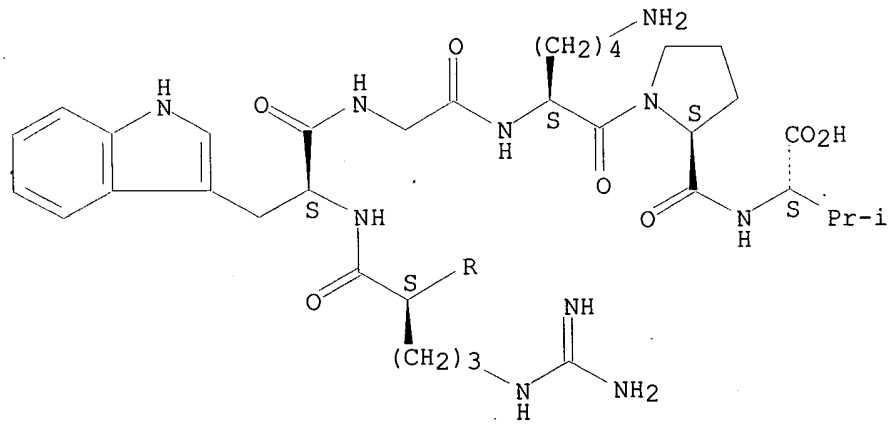
AB Des- [**22006-64-0**], mono- [581-05-5], and diacetylated melanotropin [105136-15-0] (des-, mono-, and di-Ac MSH, resp.) were compared for their dose-related effects on content of cAMP [60-92-4] and tyrosinase [9002-10-2] activity in the Cloudman S91 mouse melanoma tumor. Des-Ac MSH was more potent than the acetylated forms of MSH in increasing cellular levels of cAMP; mono- and di-Ac MSHs, however, were more potent than des-Ac MSH in elevating the activity of the enzyme, tyrosinase. Lysine-.gamma.1-MSH [105115-81-9], a melanotropin from the amino terminus of pro-opiomelanocortin (POMC), exhibited slight stimulatory effects on tyrosinase and these actions were less than additive to those of mono-Ac MSH. Neither .beta.-endorphin1-31 nor its derivs., N-Ac-.beta.-endorphin1-27 or .beta.-endorphin30-31, exhibited any influence on tyrosinase activity evoked by mono-Ac MSH in the tumor cells. Evidently, amino terminal acetylation is important for the biol. activity of melanotropins and interactions between melanotropic and nonmelanotropic POMC peptides do not occur at the level of a single cell type or at least not in mouse melanoma cells.

IT **22006-64-0**
RL: BIOL (Biological study)
(cAMP and tyrosinase response to, in melanoma)
RN 22006-64-0 CAPLUS
CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

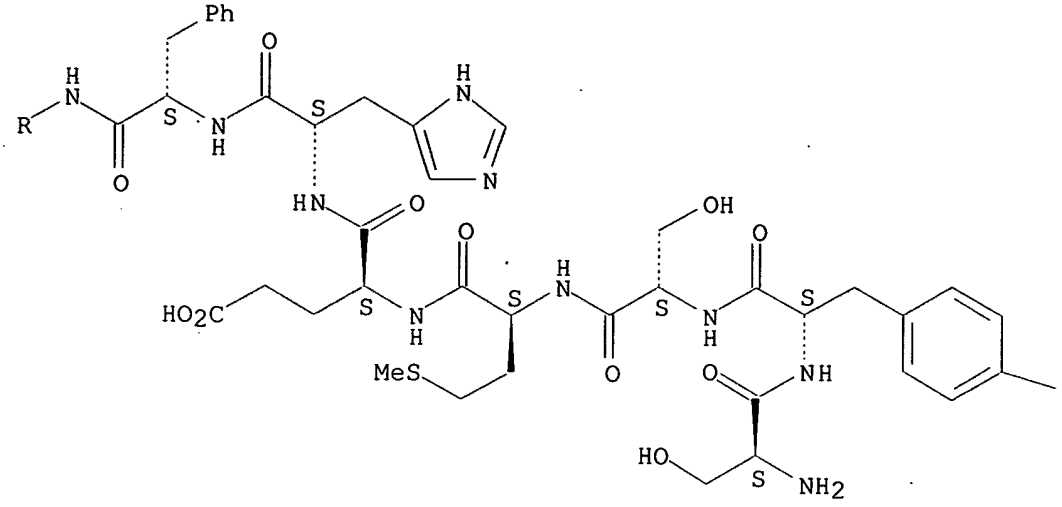
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PAGE 2-B

—OH

L7 ANSWER 60 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1986:418688 CAPLUS
DOCUMENT NUMBER: 105:18688
TITLE: Opioid and other peptides as inhibitors of leumorphin (dynorphin B-29) converting activity
AUTHOR(S): Devi, Lakshmi; Goldstein, Avram
CORPORATE SOURCE: Addict. Res. Found., Palo Alto, CA, 94304, USA
SOURCE: Peptides (New York, NY, United States) (1986), 7(1), 87-90
CODEN: PPTDD5; ISSN: 0196-9781
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A thiolprotease from rat brain membranes converted synthetic dynorphin B-29 (Dyn B-29, leumorphin) [84376-30-7] to the tridecapeptide dynorphin B (Dyn B, rimorphin) [83335-41-5]. This represents a single-arginine cleavage between threonine-13 and arginine-14 of the substrate. The dynorphin-converting enzyme [90910-06-8] displayed typical Michaelis-Menten kinetics with an apparent Km for the substrate of 0.58 .mu.M. Surprisingly, a synthetic peptide, Dyn B-29-(9-22) [102910-13-4],

which contains the cleavage site, did not inhibit the activity. Dyn A [88161-22-2] inhibited the activity competitively with an apparent Ki of 3.7 .mu.M. The converting activity was also inhibited by Dyn A-(6-17) [87079-95-6] but not by Dyn A-(8-17) [102910-14-5], suggesting a role of Arg6-Arg7 in the inhibition of converting activity. Bovine adrenal medulla peptide E [78355-50-7] inhibited the converting activity substantially whereas metorphamide [88377-68-8] did not, suggesting the importance of C-terminal residues in recognition. .beta.-Endorphin [60617-12-1] was an effective inhibitor of converting activity, and [.alpha.-N-acetyl].beta.-endorphin [80102-04-1] was not, indicating a crucial role of the free N-terminus in recognition by the enzyme. ACTH [9002-60-2] inhibited the activity competitively with an apparent Ki of 39 nM. The converting activity was also inhibited substantially by ACTH-(1-13) [**22006-64-0**] but not by .alpha.-MSH [37213-49-3] again indicating a requirement of the free N-terminus for recognition. The converting enzyme apparently recognizes peptides of the 3 known opioid gene families.

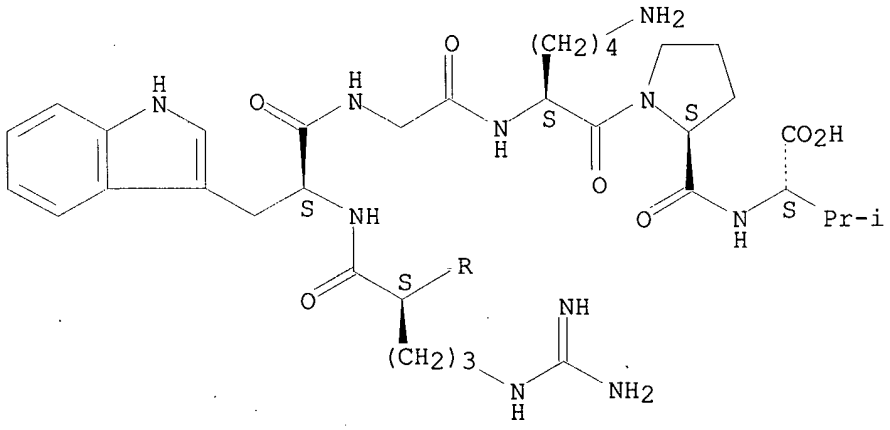
IT **22006-64-0**
RL: BIOL (Biological study)
(dynorphin-converting enzyme inhibition by, structure in relation to)

RN 22006-64-0 CAPLUS
CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

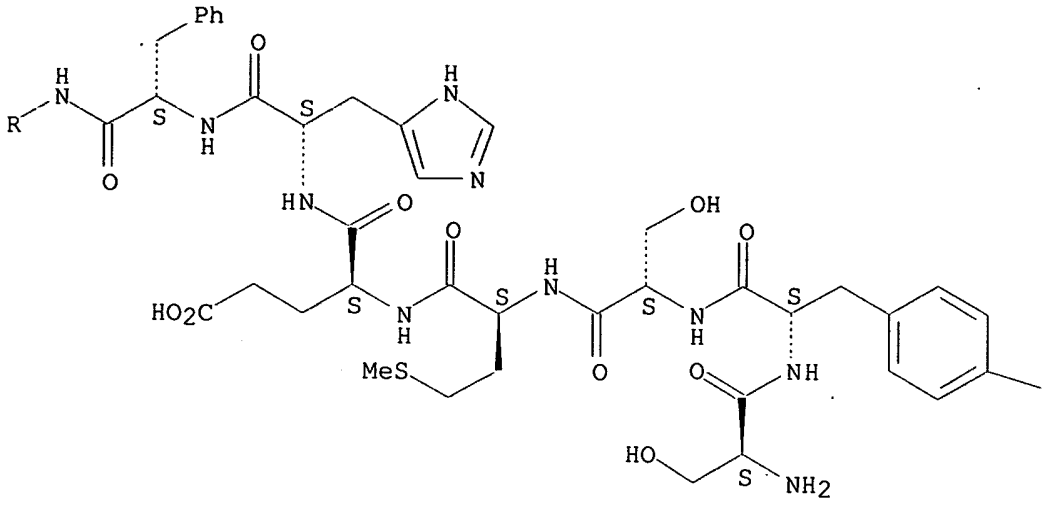
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PAGE 2-B

OH

L7 ANSWER 61 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1986:15460 CAPLUS
DOCUMENT NUMBER: 104:15460
TITLE: Regulation of cyclic AMP and cyclic GMP levels by adrenocorticotropic hormone in cultured neurons
AUTHOR(S): Anglard, Patrick; Zwiller, Jean; Vincendon, Guy; Louis, Jean Claude
CORPORATE SOURCE: Cent. Neurochim., CNRS, Strasbourg, 67084, Fr.
SOURCE: Biochemical and Biophysical Research Communications (1985), 133(1), 286-92
CODEN: BBRCA9; ISSN: 0006-291X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Incubation of neurons from embryonic chick cerebral hemispheres with ACTH(1-24) [16960-16-0] in the presence of the phosphodiesterase inhibitor isobutylmethylxanthine resulted in a sustained increase in cAMP [60-92-4] and a transient rise in cGMP [7665-99-8]. The value obtained for half-maximal stimulation were 0.5 .mu.M and 0.03 nM for cAMP and cGMP, resp. Concomitantly, ACTH(1-24) stimulated guanylate cyclase [9054-75-5] activity, with half-maximal stimulation at 0.02 nM. This suggested the

existence of 2 distinct populations of ACTH receptors in neurons, and provided the 1st evidence that cGMP may mediate the action of ACTH in neurons. Relative activities of a no. of ACTH-related peptides for affecting neuronal cyclic nucleotide levels were also reported.

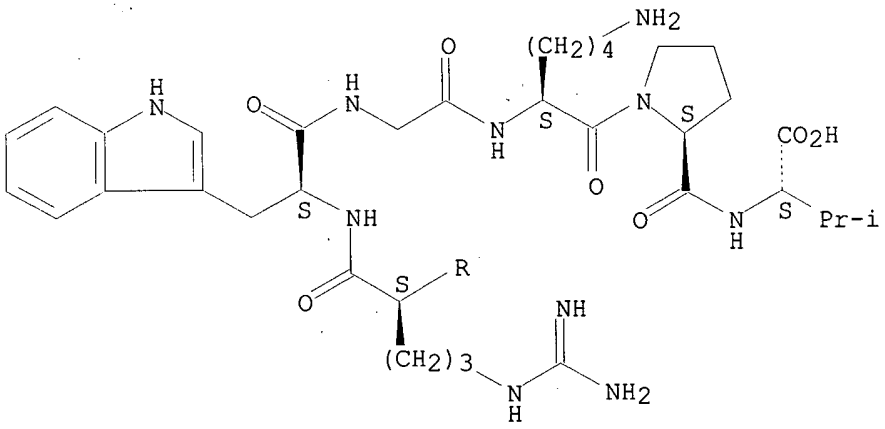
IT **22006-64-0**
RL: BIOL (Biological study)
(cyclic nucleotides formation by nerve of brain response to, structure in relation to)

RN 22006-64-0 CAPLUS
CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

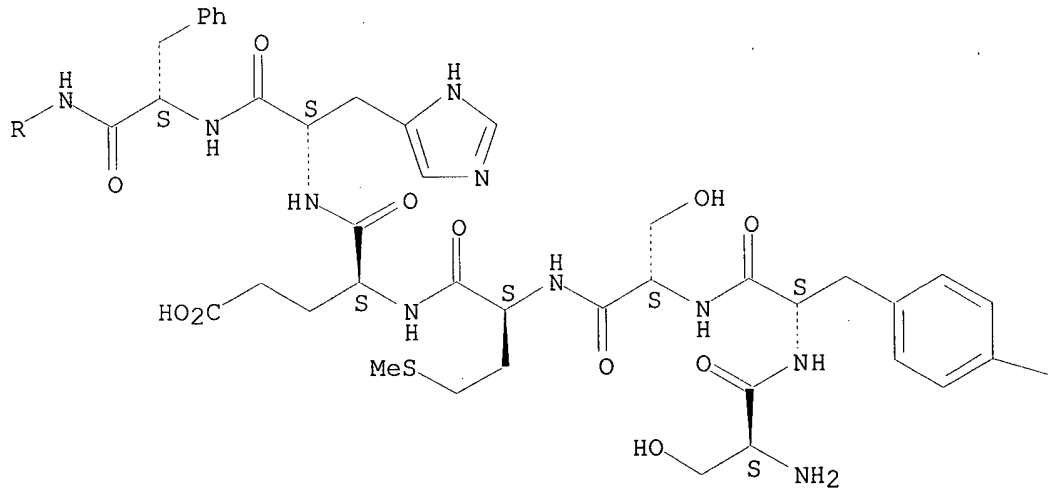
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PAGE 2-B

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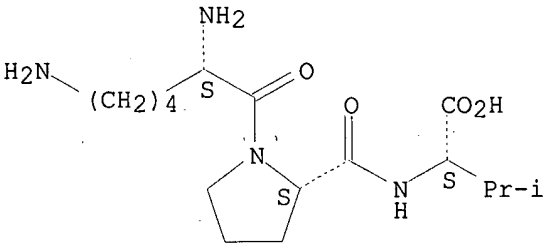
L7 ANSWER 62 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1985:535324 CAPLUS
DOCUMENT NUMBER: 103:135324
TITLE: Structure-activity studies with ACTH/.alpha.-MSH fragments on corticosteroid secretion of isolated zona glomerulosa and fasciculata cells
AUTHOR(S): Szalay, Katalin S.; De Wied, D.; Stark, E.; Folly, G.
CORPORATE SOURCE: Inst. Exp. Med., Hung. Acad. Sci., Budapest, 1450, Hung.
SOURCE: Regulatory Peptides (1985), 11(3), 187-92
CODEN: REPPDY; ISSN: 0167-0115
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The steroidogenic action of ACTH/.alpha.-MSH fragments was studied on isolated rat zona glomerulosa and zona fasciculata cells dispersed by collagenase. ACTH-(4-7) [50842-42-7], ACTH-(6-10) [2279-03-0], ACTH-(4-10) [4037-01-8], and ACTH-(11-13) [**67727-97-3**] stimulated corticosterone [50-22-6] prodn. by the zona fasciculata and aldosterone [52-39-1] prodn. by the zona glomerulosa cells. ACTH(-7-10) [51031-17-5] was ineffective. ACTH-(4-7) appeared to be the most potent peptide of the test fragments. None of the fragments affected the steroidogenic action of ACTH-(1-39) [11137-42-1]. Apparently, similar to the melanotropic effect of .alpha.-MSH, 2 message sequences for adrenocortical stimulation may exist in the .alpha.-MSH part of the ACTH mol.
IT **67727-97-3**
RL: BIOL (Biological study)
(aldosterone and corticosterone formation by the adrenal cortex stimulation by, structure in relation to)
RN 67727-97-3 CAPLUS
CN L-Valine, L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 63 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1985:181028 CAPLUS
DOCUMENT NUMBER: 102:181028
TITLE: Similarity between the corticotropin (ACTH) receptor and a peptide encoded by an RNA that is complementary to ACTH mRNA
AUTHOR(S): Bost, Kenneth L.; Smith, Eric M.; Blalock, J. Edwin
CORPORATE SOURCE: Dep. Microbiol., Univ. Texas, Galveston, TX, 77550, USA
SOURCE: Proceedings of the National Academy of Sciences of the United States of America (1985), 82(5), 1372-5
CODEN: PNASA6; ISSN: 0027-8424
DOCUMENT TYPE: Journal
LANGUAGE: English

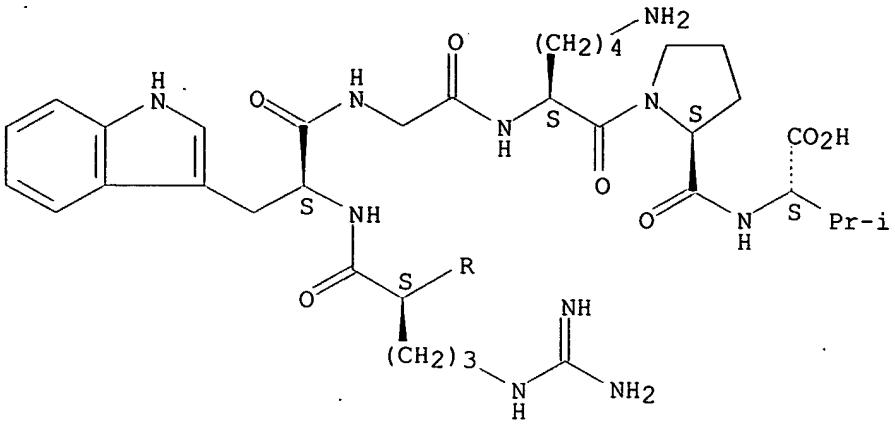
AB An interesting pattern in the genetic code was recently obsd. where codons for hydrophobic amino acids on one nucleic acid strand are complemented by those for hydrophilic amino acids on the other strand, and vice versa, and codons for uncharged (slightly hydrophilic) amino acids are complemented by other codons for uncharged (slightly hydrophilic) amino acids. This pattern is postulated to result in the binding of peptides that are encoded by complementary RNA strands. In this report, the specific and high-affinity binding of naturally occurring peptides [corticotropin (ACTH) and .gamma.-endorphin] to synthetically derived RNA sequences complementary to the mRNA for ACTH and .gamma.-endorphin, resp., is demonstrated. That this binding might result from one peptide being an internal image of the other was strongly suggested by the observation that antibody to the peptide encoded by the complementary RNA for ACTH recognized the adrenal cell ACTH receptor. Based on these findings, a theory of the evolution of peptides and their receptors is suggested.

IT **22006-64-0**
RL: BIOL (Biological study)
(receptor for, synthetic complementary mRNA-encoded peptide as)
RN 22006-64-0 CAPLUS
CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

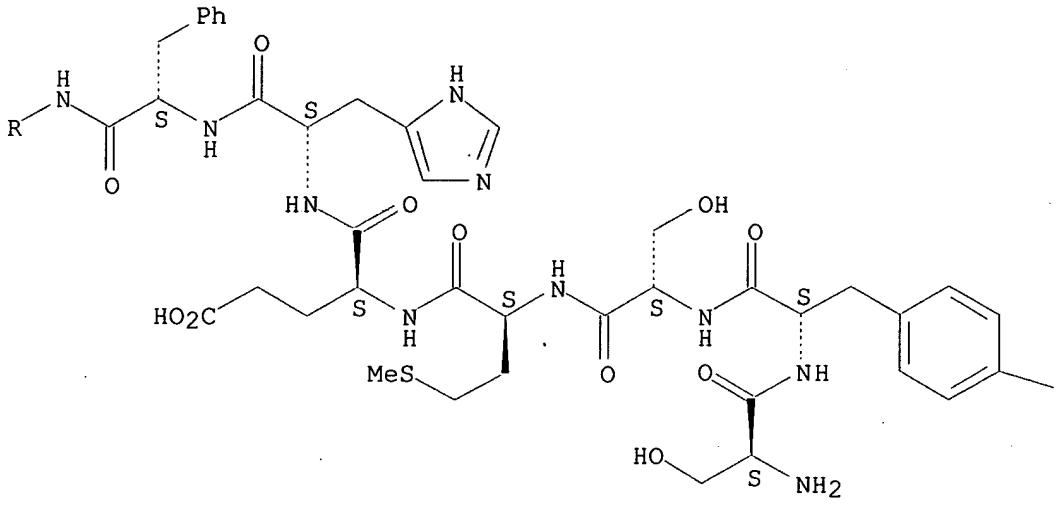
SEQ 1 SYSMEHFRWG-KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PAGE 2-B

L7 ANSWER 64 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1985:20133 CAPLUS
DOCUMENT NUMBER: 102:20133
TITLE: Hypothalamic peptidyl-glycine .alpha.-amidating monooxygenase: preliminary characterization
AUTHOR(S): Emeson, Ronald B.
CORPORATE SOURCE: Sch. Med., Johns Hopkins Univ., Baltimore, MD, 21205, USA
SOURCE: Journal of Neuroscience (1984), 4(10), 2604-13
CODEN: JNRSDS; ISSN: 0270-6474
DOCUMENT TYPE: Journal
LANGUAGE: English

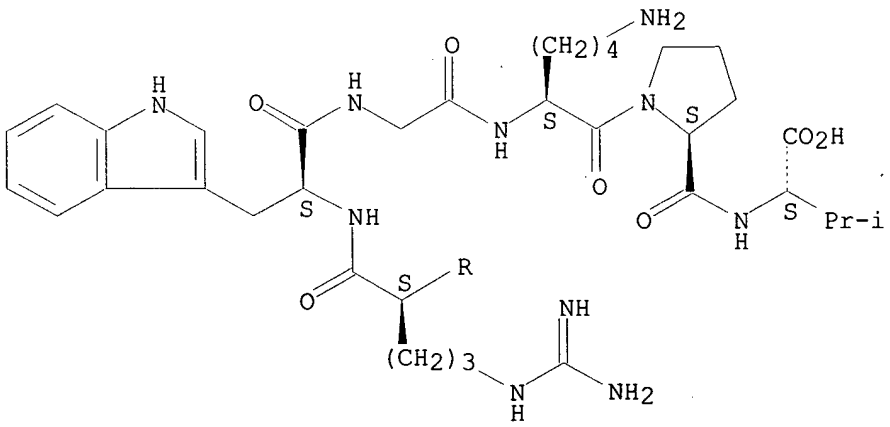
AB An enzymic activity capable of converting 125I-labeled D-Tyr-Val-Gly into 125I-labeled D-Tyr-Val-NH2 was identified in a crude mitochondrial/synaptosomal prepn. from rat hypothalamus. Further subcellular fractionation studies localized a majority of this enzymic activity to fractions enriched in synaptic vesicles. The .alpha.-amidation activity demonstrated optimal activity at pH 7.5-8, was stimulated by the presence of Cu2+ and reduced ascorbate, and required the presence of O2. Endogenous .alpha.-amidation activity was inhibited by the addn. of ascorbate oxidase. Kinetic analyses demonstrated Michaelis-Menten-type kinetics for D-Tyr-Val-Gly as the varied substrate with the values of Km and Vmax increasing as the ascorbate concn. in the reaction increased. A variety of peptides possessing C-terminal glycine residues were potent inhibitors of the reaction, whereas peptides lacking a C-terminal glycine residue were not, suggesting that many glycine-extended peptides may serve as substrates in the .alpha.-amidation reaction. The characteristics of hypothalamic .alpha.-amidation activity are similar to those previously reported for the .alpha.-amidation activity in rat pituitary and mouse corticotropic tumor cells, suggesting the presence of closely related enzymes in these tissues.

IT **22006-64-0**
RL: BIOL (Biological study)
(peptidyl-glycine .alpha.-amidating monooxygenase of hypothalamus in response to)
RN 22006-64-0 CAPLUS
CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

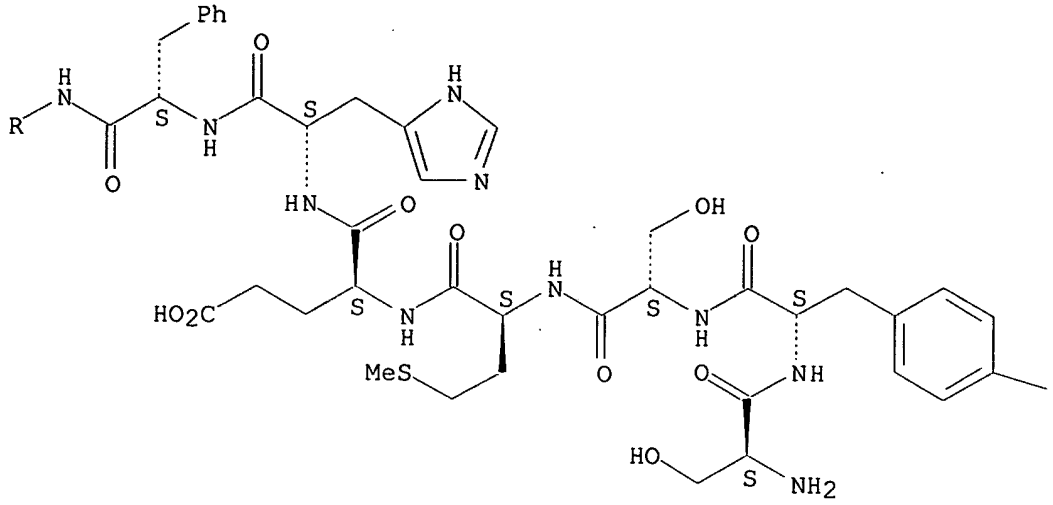
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PAGE 2-B

OH

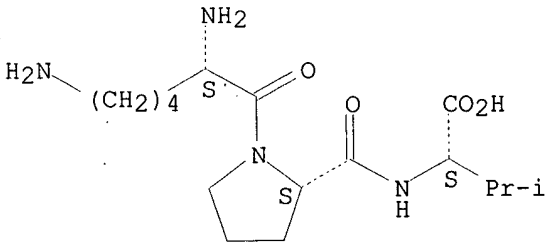
L7 ANSWER 65 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1984:523621 CAPLUS
DOCUMENT NUMBER: 101:123621
TITLE: Effect of .alpha.-MSH 11-13 (lysine-proline-valine) on fever in the rabbit
AUTHOR(S): Richards, D. B.; Lipton, J. M.
CORPORATE SOURCE: Health Sci. Cent., Univ. Texas, Dallas, TX, 75235, USA
SOURCE: Peptides (New York, NY, United States) (1984), 5(4), 815-17
CODEN: PPTDD5; ISSN: 0196-9781
DOCUMENT TYPE: Journal
LANGUAGE: English
AB .alpha.-MSH(11-13) (Lys-Pro-Val) [**67727-97-3**] was injected centrally and peripherally to rabbits made febrile by i.v. administration of leukocytic pyrogen. The tripeptide reduced fever after both central (0.5-2.0 mg) and peripheral (2-200 mg) administration. Thus, the 11-13 sequence is part of the message sequence of .alpha.-MSH with regard to antipyretic activity. However, the lower potency relative to that of the

parent mol. suggests that other portions of the mol. are essential to full expression of the antipyretic effect.

IT **67727-97-3**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(antipyretic activity of)

RN 67727-97-3 CAPLUS
CN L-Valine, L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 66 OF 79 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1984:484125 CAPLUS
DOCUMENT NUMBER: 101:84125
TITLE: Serotonin binding sites. I. Structures of sites on myelin basic protein, LH-RH, MSH, ACTH, interferon, serum albumin, ovalbumin and red pigment concentrating hormone
AUTHOR(S): Root-Bernstein, Robert Scott; Westall, Fred C.
CORPORATE SOURCE: Salk Inst. Biol. Stud., San Diego, CA, 92138-9216, USA
SOURCE: Brain Research Bulletin (1984), 12(4), 425-36
CODEN: BRBUDU; ISSN: 0361-9230
DOCUMENT TYPE: Journal
LANGUAGE: English

AB NMR spectroscopy studies of combinations of 5-HT [50-67-9] with tryptophan-contg. peptide sequences and similar peptides from myelin basic protein are given. The binding site appears to consist of the sequence Arg-Phe-Ser-Trp. Similar 5-HT-binding sites exist on LH-RH [33515-09-2] (Tyr-Ser-Trp) and MSH-ACTH tetrapeptide [4289-02-5] (Phe-Arg-Trp). These binding sites are specific to 5-HT as was demonstrated by lack of binding by other pharmacol. active amines and indoles. Drugs known to affect 5-HT levels, e.g., fenfluramine [458-24-2] and L-DOPA [59-92-7], bound weakly to these sites. Structural and functional similarities between the tryptophan-contg. peptide sequences, LH-RH, and MSH-ACTH with an ACTH-like peptide of human leukocyte interferon, human and bovine serum albumin, hen ovalbumin, and with red pigment-concg. hormone [37933-92-9] suggest that the latter peptides may also contain similar 5-HT-binding sites. The elucidation of 5-HT-binding sites on these peptides and proteins has implications for understanding various aspects of cancer, autoimmunity, neurol. disease, and peptide hormone control.

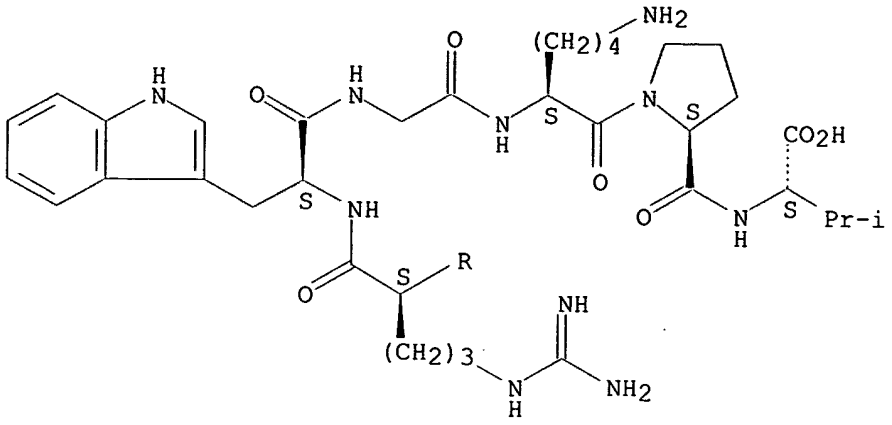
IT **22006-64-0**
RL: BIOL (Biological study)
(serotonin-binding site of, structure in relation to)

RN 22006-64-0 CAPLUS
CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

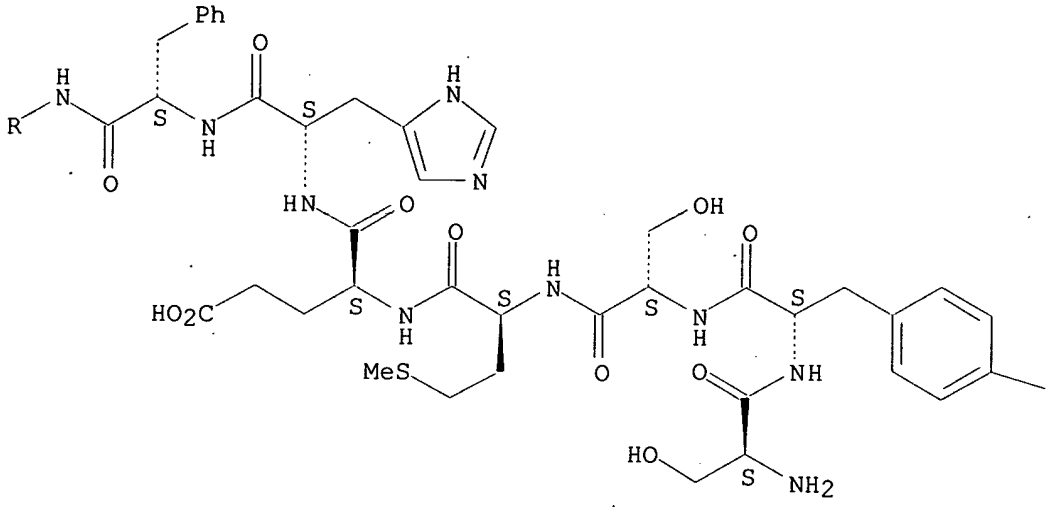
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PAGE 2-B

L7 ANSWER 67 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1984:400929 CAPLUS
DOCUMENT NUMBER: 101:929
TITLE: 'Molecular sandwiches' as a basis for structural and functional similarities of interferons, MSH, ACTH, LH-RH, myelin basic protein, and albumins
AUTHOR(S): Root-Bernstein, Robert Scott
CORPORATE SOURCE: Salk Inst. Biol. Stud., San Diego, CA, 92138-9216, USA
SOURCE: FEBS Letters (1984), 168(2), 208-12
CODEN: FEBLAL; ISSN: 0014-5793
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Sequential similarities between the tryptophan peptide of myelin basic protein (residues 111-121), synthetic LH-RH [33515-09-2], melanotropin [9002-79-3], 1-13-ACTH [**22006-64-0**], human leukocyte interferon (residues 28-40), and various segments of human and bovine serum albumin and hen ovalbumin were presented. It was suggested that these structural similarities may explain observations concerning common functional characteristics such as serotonin modulation, immunol. activity with the adjuvant muramyl dipeptide, immunol. crossreactivity, and the possible MSH-ACTH-like activity of a pepsin-derived peptide of interferon.

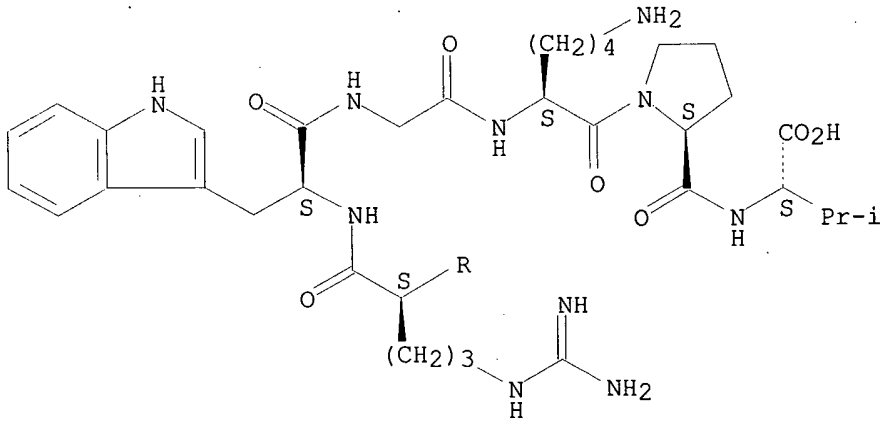
IT **22006-64-0**
RL: BIOL (Biological study)
(sequence homol. of, with human interferon)

RN 22006-64-0 CAPLUS
CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

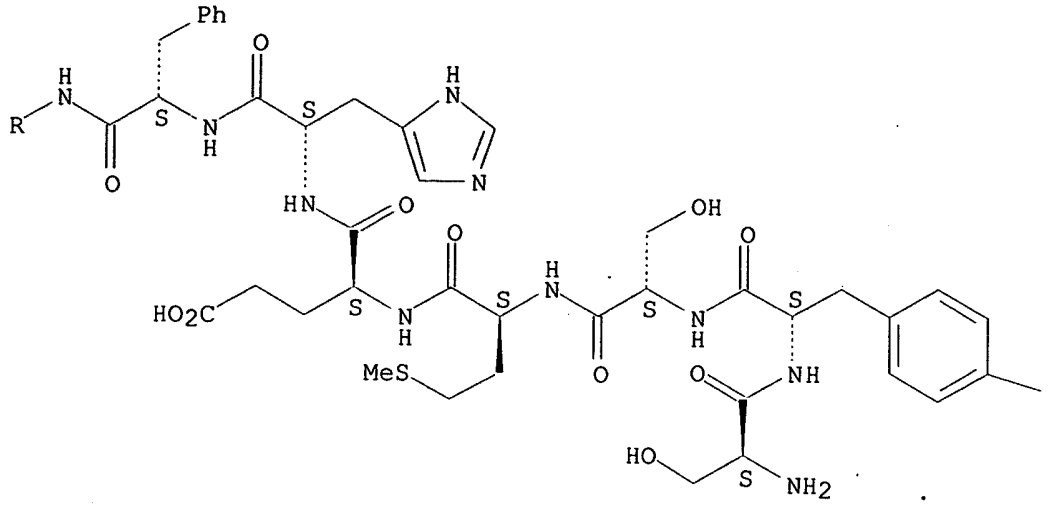
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PAGE 2-B

OH

L7 ANSWER 68 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1983:569766 CAPLUS
DOCUMENT NUMBER: 99:169766
TITLE: Centrally administered N-terminal fragments of ACTH (1-10, 4-10, 4-9) display convulsant properties in rabbits
AUTHOR(S): Tartara, Amelia; Bo, Paola; Maurelli, Maurizia; Savoldi, Faustino
CORPORATE SOURCE: Neurol. Clin., Univ. Pavia, Pavia, Italy
SOURCE: Peptides (New York, NY, United States) (1983), 4(3), 315-18
CODEN: PPTDD5; ISSN: 0196-9781
DOCUMENT TYPE: Journal
LANGUAGE: English
AB EEG and behavioral effects of the following ACTH fragments: 1-4 [19405-50-6], 4-9 [56236-83-0], 4-11 [67224-41-3], 1-10 [2791-05-1], 4-10 [4037-01-8], 1-13 [**22006-64-0**], 1-17 [1285-85-4], and 1-24 [16960-16-0] were studied in rabbits. Sequences 4-9, 1-10, and 4-10 displayed some epileptic properties, i.e., they induced epileptic seizures (only EEG or also behavioral) or increased hippocampal spiking. The 4-9

sequence seemed to be the common sequence responsible for these proconvulsant effects. The possible involvement of the enkephalinergic system is discussed.

IT **22006-64-0**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(convulsion activity of, structure in relation to)

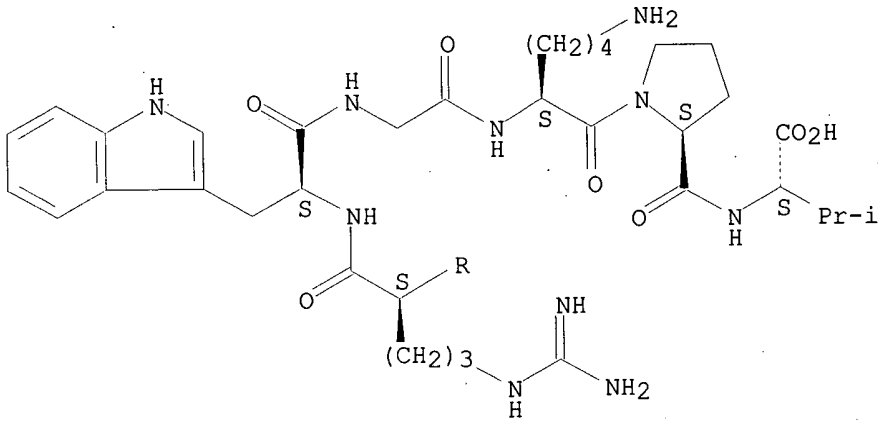
RN 22006-64-0 CAPLUS

CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

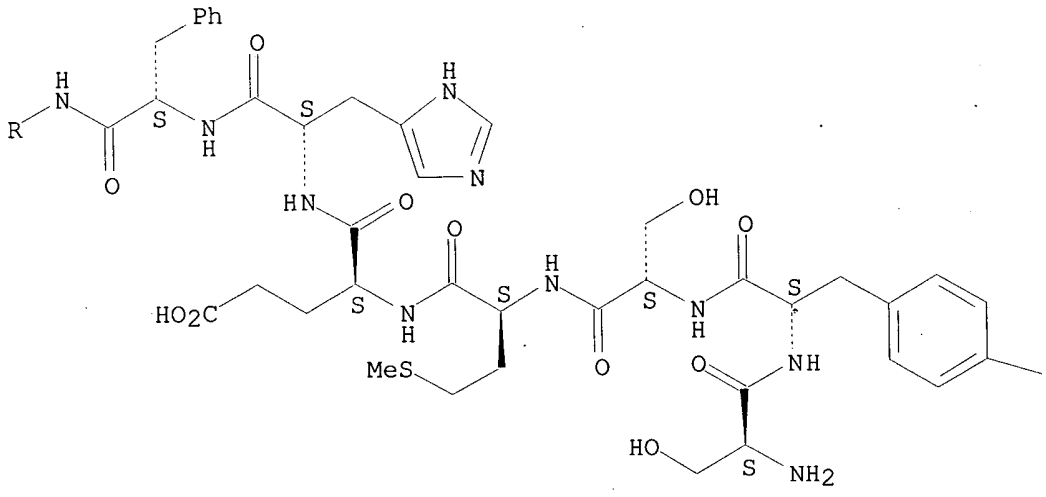
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



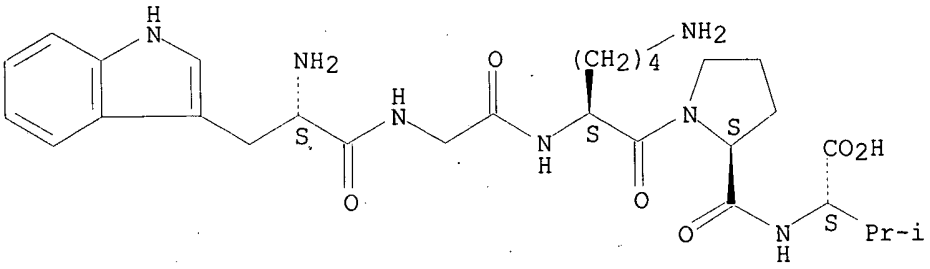
PAGE 2-B

—OH

L7 ANSWER 69 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1982:213629 CAPLUS
DOCUMENT NUMBER: 96:213629
TITLE: Sequence analysis of polypeptides by collision activated dissociation on a triple quadrupole mass spectrometer
AUTHOR(S): Hunt, Donald F.; Buko, Alexander M.; Ballard, John M.; Shabanowitz, Jeffrey; Giordani, Anne B.
CORPORATE SOURCE: Dep. Chem., Univ. Virginia, Charlottesville, VA, 22901, USA
SOURCE: Soft Ioniz. Biol. Mass Spectrom., Proc. Chem. Soc. Symp. (1981), Meeting Date 1980, 85-109. Editor(s): Morris, Howard R. Heyden: London, UK.
CODEN: 47MJAK
DOCUMENT TYPE: Conference
LANGUAGE: English
AB A method is described for direct sequencing of oligopeptides in complex mixts. produced by enzymic and acid hydrolysis of large protein segments. Mixts. of oligopeptides contg. 2-8 residues are N-acetylated and N,O-permethylated by the procedure of H. R. Morris (1972), then volatilized directly into the ion source of a tandem or double analyzer mass spectrometer without fractionation by wet chem. or chromatog. steps. Mass spectra produced by isobutane chem. ionization of the d0/d3-N-acetyl-N,O-permethylated oligopeptides and by collision activated dissocn. of ions in the isobutane chem.-ionization mass spectra of these derivs. are summarized. The title procedure is demonstrated with sequence anal. of glucagon and methionine-enkephalin.
IT **81156-21-0**
RL: PRP (Properties)
(mass spectrum of)
RN 81156-21-0 CAPLUS
CN L-Valine, L-tryptophylglycyl-L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

SEQ 1 WGKPV

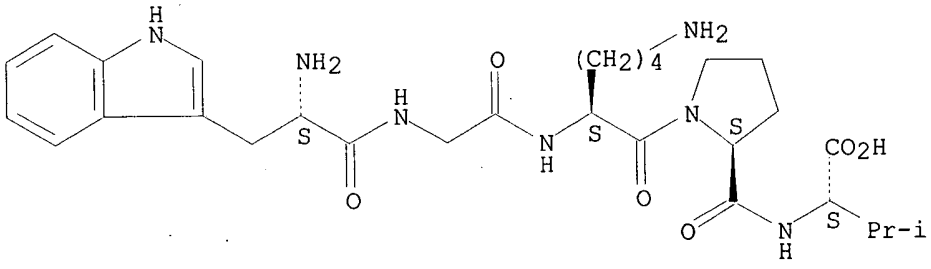
Absolute stereochemistry.



L7 ANSWER 70 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1982:143295 CAPLUS
DOCUMENT NUMBER: 96:143295
TITLE: Sequence analysis of polypeptides by collision activated dissociation on a triple quadrupole mass spectrometer
AUTHOR(S): Hunt, Donald F.; Buko, Alexander M.; Ballard, John M.; Shabanowitz, Jeffrey; Giordani, Anne B.
CORPORATE SOURCE: Dep. Chem., Univ. Virginia, Charlottesville, VA, 22901, USA
SOURCE: Biomedical Mass Spectrometry (1981), 8(9), 397-408
CODEN: BMSYAL; ISSN: 0306-042X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A method is reported for the direct sequencing of oligopeptides in complex mixts. Mixts. of [2H0]/[2H3]-N-acetylated and N,O-permethylated peptides were analyzed by collisional activation dissocn. on a triple quadrupole mass spectrometer using isobutane chem. ionization. Use is described of electron capture neg. chem. ionization for sequence anal. of neuropeptides at the pmol level.
IT **81156-21-0**
RL: PRP (Properties)
(amino acid sequence of, collisional activation mass spectrum in relation to)
RN 81156-21-0 CAPLUS
CN L-Valine, L-tryptophylglycyl-L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

SEQ 1 WGKPV

Absolute stereochemistry.



L7 ANSWER 71 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1982:46389 CAPLUS
DOCUMENT NUMBER: 96:46389

TITLE: Modulation of brain polyphosphoinositide metabolism by ACTH and .beta.-endorphin: structure-activity studies

AUTHOR(S): Jolles, J.; Bar, P. R.; Gispen, W. H.
CORPORATE SOURCE: Rudolf Magnus Inst. Pharmacol., State Univ. Utrecht, Neth.

SOURCE: Brain Research (1981), 224(2), 315-26
CODEN: BRREAP; ISSN: 0006-8993
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The effects of ACTH1-24 [16960-16-0] and .beta.-endorphin [60617-12-1] on brain polyphosphoinositide metab. were studied in vitro. The interconversion of these polyanionic phospholipids was studied by incubation of a lysed synaptosomal fraction with [.gamma.-32P]-labeled ATP [56-65-5]. Of the membrane phospholipids only phosphatidic acid (PA), diphosphoinositides (DPI) and triphosphoinositides (TPI) became labeled. ACTH1-24 stimulated the formation of TPI and inhibited the prodn. of PA. For effects on TPI formation both the sequences ACTH5-7 and ACTH10-16 were needed. Effects on PA formation required the sequences ACTH7-10 and ACTH10-16. The basic amino acids in ACTH10-16 seemed to be of crucial importance for the peptide effects. A stimulatory effect on DPI was visible when ACTH was shortened from the N-terminus, and the essential information was in ACTH7-10. .beta.-Endorphin inhibited PA formation and this effect was abolished by C-terminal shortening to .gamma.-endorphin. Other fragments of the C-terminus of .beta.-LPH, including the enkephalins, were ineffective. The structure-activity relationship on TPI/PA formation correlates with a similar relationship obtained on excessive grooming behavior in vivo.

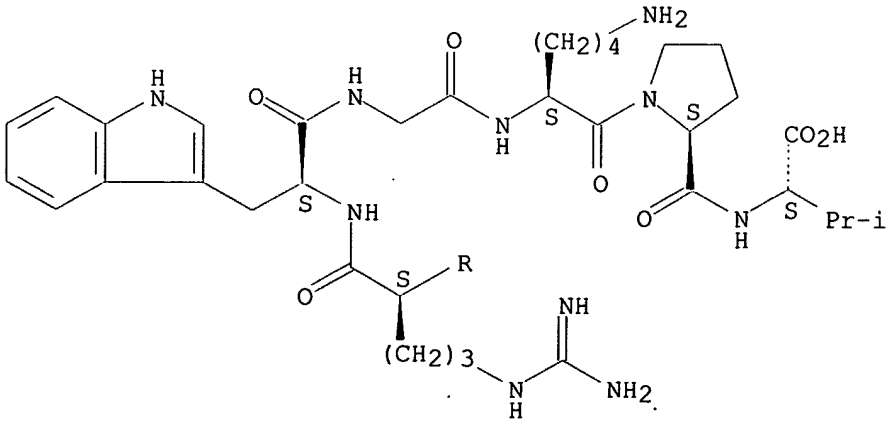
IT **22006-64-0**
RL: BIOL (Biological study)
(brain polyphosphoinositide metab. response to, structure in relation to)

RN 22006-64-0 CAPLUS
CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

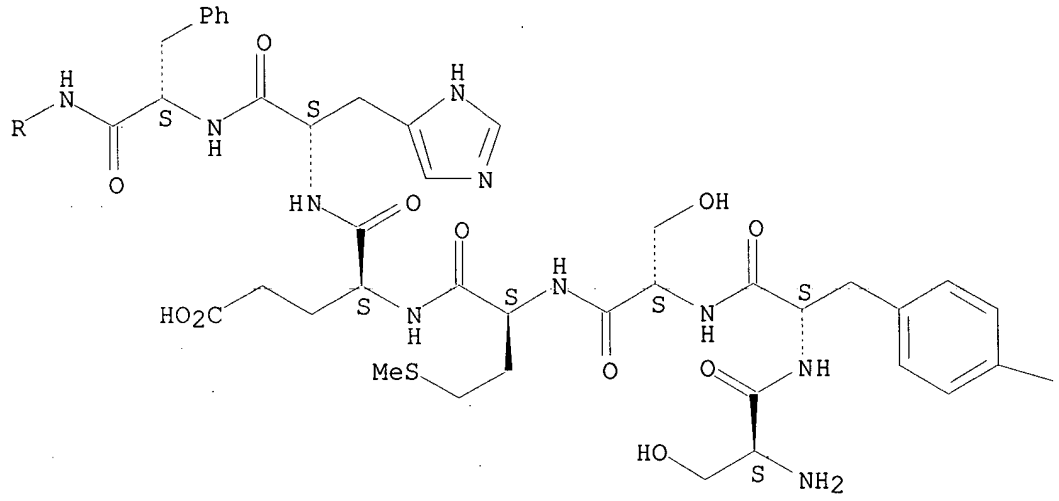
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PAGE 2-B

OH

L7 ANSWER 72 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1980:16021 CAPLUS
DOCUMENT NUMBER: 92:16021
TITLE: Comparison of the mode of action of .alpha.-melanotropin, its fragments and analogs
AUTHOR(S): Medzihradszky, K.; Magyar, A.; Suli-Vargha, H.; Medzihradszky-Schweiger, H.
CORPORATE SOURCE: Cent. Res. Inst. Chem., Hung. Acad. Sci., Budapest, Hung.
SOURCE: Symp. Pap. - IUPAC Int. Symp. Chem. Nat. Prod., 11th (1978), Volume 1, 282-5. Editor(s): Marekov, N.; Ognyanov, I.; Orahovats, A. Izd. BAN: Sofia, Bulg. CODEN: 41RTAX
DOCUMENT TYPE: Conference
LANGUAGE: English
AB The melanocyte-stimulating activities of synthetic .alpha.-MSH [581-05-5], deamido-.alpha.-MSH [**10466-28-1**], and 1-14-ACTH [25696-21-3] on frog skin were 4 .times. 1010, 4 .times. 1010, and 5 .times. 109 units/mmol, resp. When these oligopeptides were applied simultaneously neither competitive inhibition nor cooperative effects

occurred. However, Glu-His-Phe-Arg-Trp-Gly [4086-29-7] and Glu-His-Phe [60438-42-8] exhibited cooperative effects with .alpha.-MSH. Owing to their similar structures, .alpha.-MSH, deamido-.alpha.-MSH, and 1-14-ACTH apparently act on the same receptor.

IT **10466-28-1**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study) (biol. activity of, structure in relation to)

RN 10466-28-1 CAPLUS

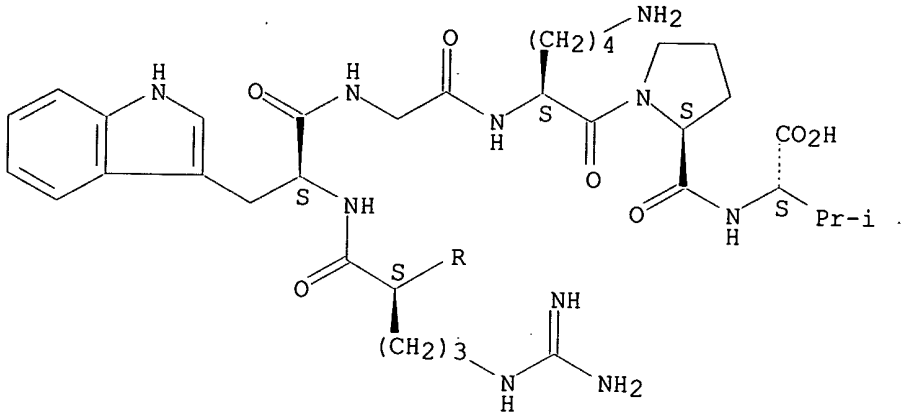
CN .alpha.-Melanotropin (swine), 13-L-valine- (9CI) (CA INDEX NAME)

NTE modified

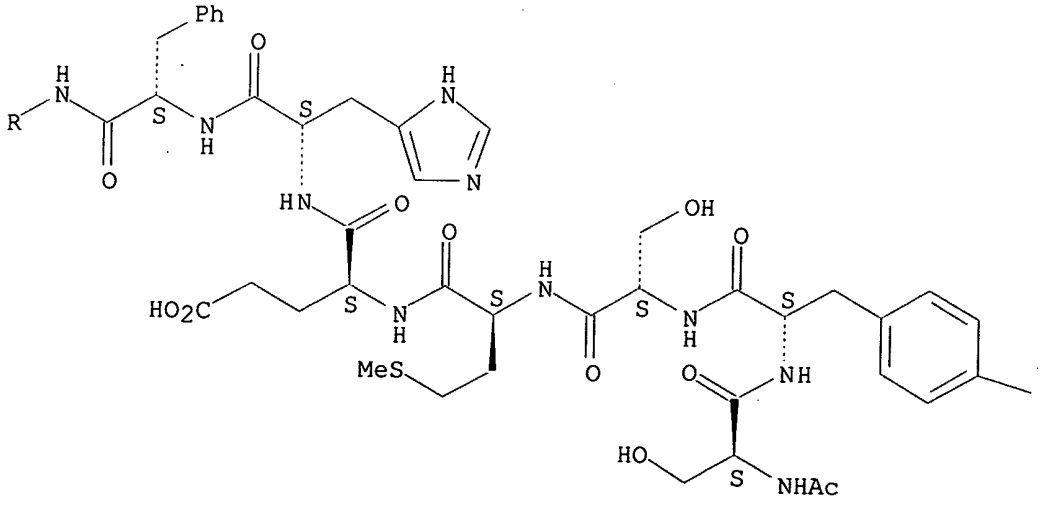
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



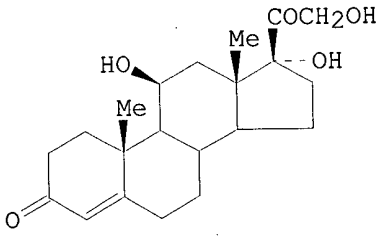
PAGE 2-A



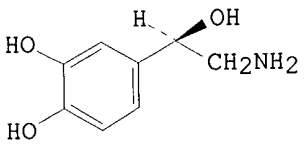
PAGE 2-B

OH

L7 ANSWER 73 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1979:48789 CAPLUS
DOCUMENT NUMBER: 90:48789
TITLE: Glucocorticoids, adrenocorticotropic hormone and related polypeptides on myocardial sensitivity to noradrenaline
AUTHOR(S): Bassett, Jack R.; Strand, Fleur L.; Cairncross, Keith D.
CORPORATE SOURCE: Sch. Biol. Sci., Macquarie Univ., North Ryde, Australia
SOURCE: European Journal of Pharmacology (1978), 49(3), 243-9
CODEN: EJPHAZ; ISSN: 0014-2999
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I



II

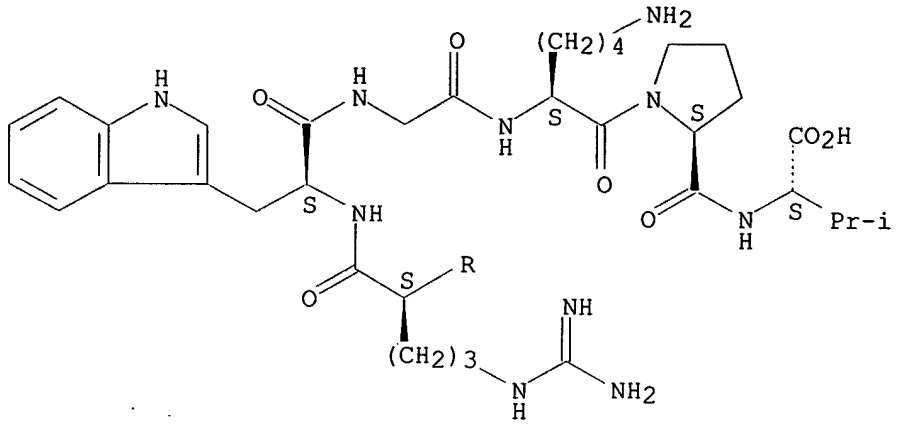
AB The effects of the glucocorticoids, cortisol (I) [50-23-7] and corticosterone [50-22-6], and of ACTH1-24 [16960-16-0] and ACTH-related polypeptides on the myocardial sensitivity to catecholamines were investigated using an elec. driven atrial strip prepn. of the rat were studied. Both glucocorticoids and ACTH dose-dependently potentiated the inotropic response to noradrenaline (II) [51-41-2]. ACTH1-13 [**22006-64-0**] did not potentiate the myocardial response to II but rather at high doses inhibited the response. All other polypeptides tested, ACTH4-10 [4037-01-8], (7-D-phenylalanine)-ACTH4-10 [39877-09-3], ACTH1-16 [5576-42-1], ACTH5-16 [66799-91-5], and ACTH11-24 [4237-93-8] produced no change in myocardial sensitivity. The enhanced myocardial sensitivity to catecholamines seen following stress situations may result from both the glucocorticoids and the pituitary peptide, ACTH. As with the steroidogenic activity of the mol., all of the 1st 24 amino acids of the ACTH peptide chain are required for its action on the myocardium.

IT **22006-64-0**
RL: BIOL (Biological study)
(heart contraction response to noradrenaline and)
RN 22006-64-0 CAPLUS
CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

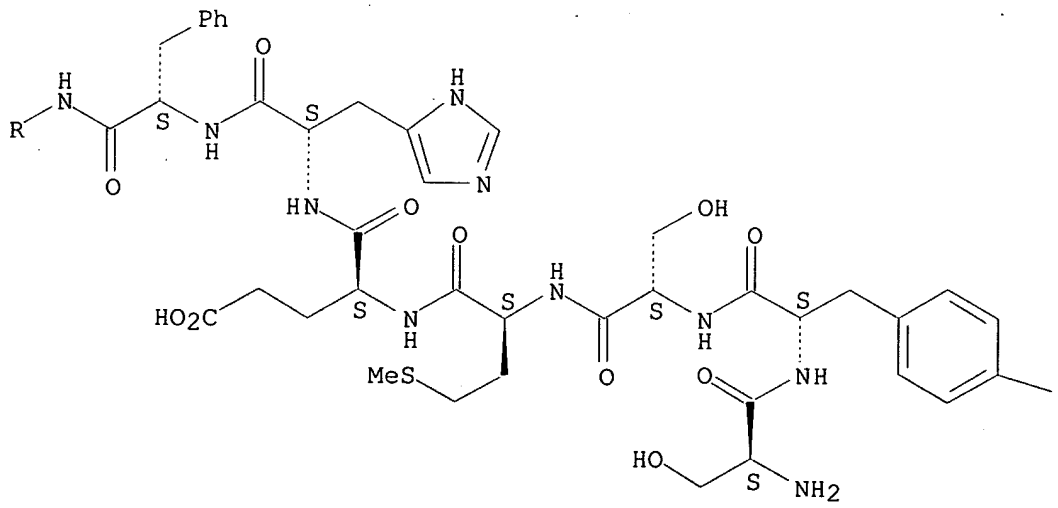
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

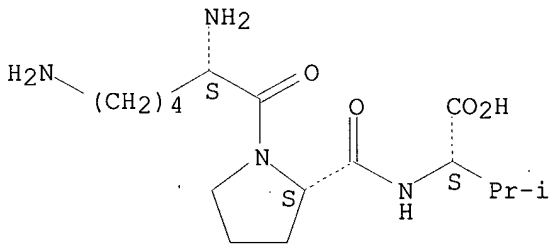


PAGE 2-B

OH

L7 ANSWER 74 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1978:540824 CAPLUS
DOCUMENT NUMBER: 89:140824
TITLE: Model of the structural-functional organization of adrenocorticotropic hormone
AUTHOR(S): Porunkevich, E. A.; Kublis, G.; Skuins, A.
CORPORATE SOURCE: Inst. Org. Sint., Riga, USSR
SOURCE: Tezisy Dokl. - Resp. Konf. Molodykh Uch.-Khim., 2nd (1977), Volume 1, 140-1. Akad. Nauk Est. SSR, Inst. Khim.: Tallinn, USSR.
CODEN: 38RMAG
DOCUMENT TYPE: Conference
LANGUAGE: Russian
AB Based on a comparison of the steroidogenic and lipolytic activities of 10 ACTH fragments 2 active centers were found: specific, 6-9ACTH [4289-02-5], and non specific 11-13ACTH [**67727-97-3**].
IT **67727-97-3**
RL: BIOL (Biological study)
(as corticotropin nonsp. active center)
RN 67727-97-3 CAPLUS
CN L-Valine, L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 75 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1978:500485 CAPLUS
DOCUMENT NUMBER: 89:100485
TITLE: ACTH-induced lipolysis in rat adipocytes: structure-activity relationships
AUTHOR(S): Opmeer, F. A.; Van Ree, J. M.; De Wied, D.
CORPORATE SOURCE: Rudolf Magnus Inst. Pharmacol., Univ. Utrecht,

SOURCE: Utrecht, Neth.
Naunyn-Schmiedeberg's Archives of Pharmacology (1978), 302(1), 31-6
CODEN: NSAPCC; ISSN: 0369-5565
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The lipolytic action of natural porcine ACTH1-39 [9061-27-2] and of a no. of highly purified synthetic ACTH peptide fragments were studied using rat adipocytes. Of the analogs tested, only ACTH1-24 [16960-16-0] exhibited full lipolytic activity with respect to intrinsic activity and affinity. Several shorter fragments appeared to be full agonists but had lower affinity. Fragments ACTH5-10 [4086-29-7] and ACTH7-10 [51031-17-5] were inactive. No antagonistic effects against the lipolytic action of ACTH could be demonstrated with substimulatory doses of ACTH1-16 [5576-42-1], ACTH1-10 [2791-05-1], (D-Lys8,Phe9)-ACTH7-24 [66825-26-1], and ACTH11-24 [4237-93-8]. Based on the relative potency derived from dose-response curves, a more refined model with respect to the active centers being encoded in various sequences of the hormone, is proposed.

IT **22006-64-0**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(lipolytic activity of, structure in relation to)

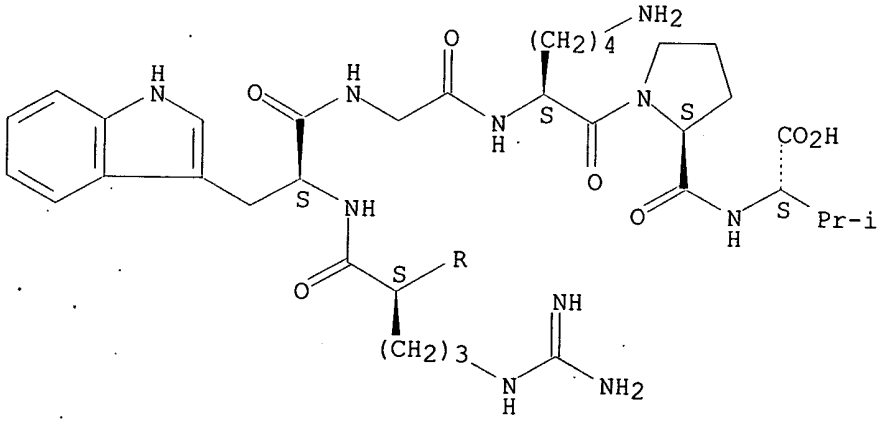
RN 22006-64-0 CAPLUS

CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

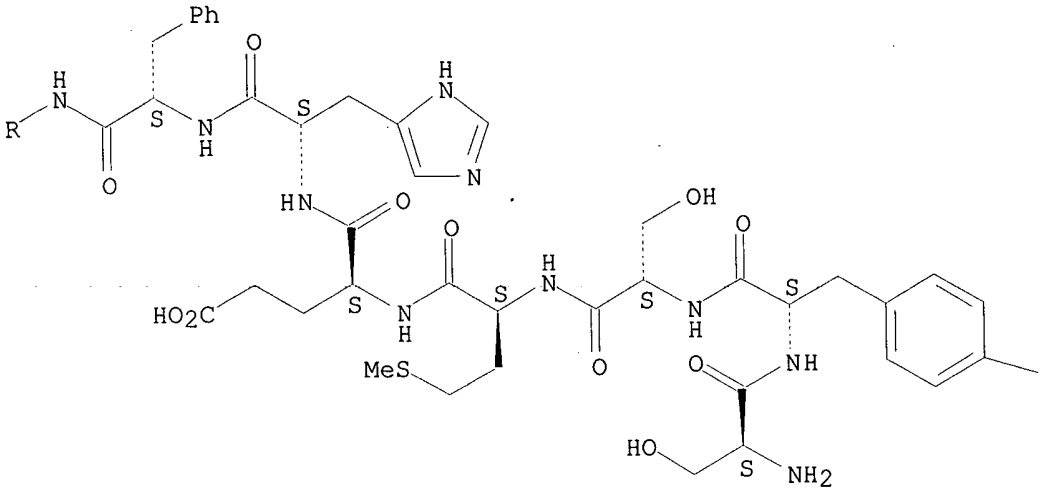
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PAGE 2-B

—OH

L7 ANSWER 76 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1976:517157 CAPLUS
DOCUMENT NUMBER: 85:117157
TITLE: Sexual arousal in male animals: a central effect of ACTH-like peptides in mammals
AUTHOR(S): Bertolini, A.; Ferrari, W.; Fratta, W.; Gessa, G. L.; Mereu, G. P.; Tagliamonte, A.
CORPORATE SOURCE: Inst. Pharmacol., Univ. Modena, Modena, Italy
SOURCE: Pept.: Chem., Struct. Biol., Proc. Am. Pept. Symp., 4th (1975), 659-65. Editor(s): Walter, Roderich; Meienhofer, Johannes. Ann Arbor Sci.: Ann Arbor, Mich.
CODEN: 33UYAW
DOCUMENT TYPE: Conference
LANGUAGE: English
AB In male rats, cycloheximide (5, 10, or 20 mg/kg) administered by intraventricular injection prevented both the sexual response and the stretching-yawning (SYS) effect of .beta.-ACTH1-24 [16960-16-0]. On the contrary, the effects of ACTH were potentiated by the intraventricular injection of theophylline [58-55-9], which by itself was inactive. An

ACTH-like peptide isolated from rat hypothalamus produced both the sexual response and SYS effect when injected into the lateral ventricle of male rabbits. The amt. of this material was markedly increased in rats which had been both hypophysectomized and adrenalectomized.

IT **22006-64-0**
RL: BIOL (Biological study)
(behavior and sex activity response to, in male rats)

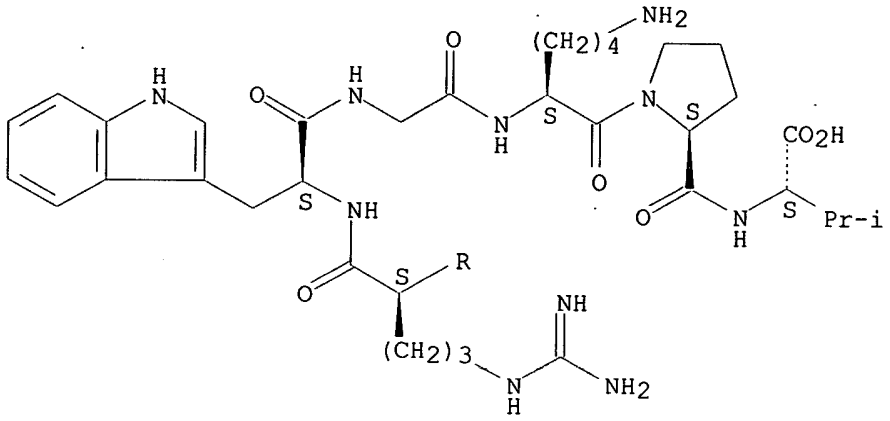
RN 22006-64-0 CAPLUS

CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

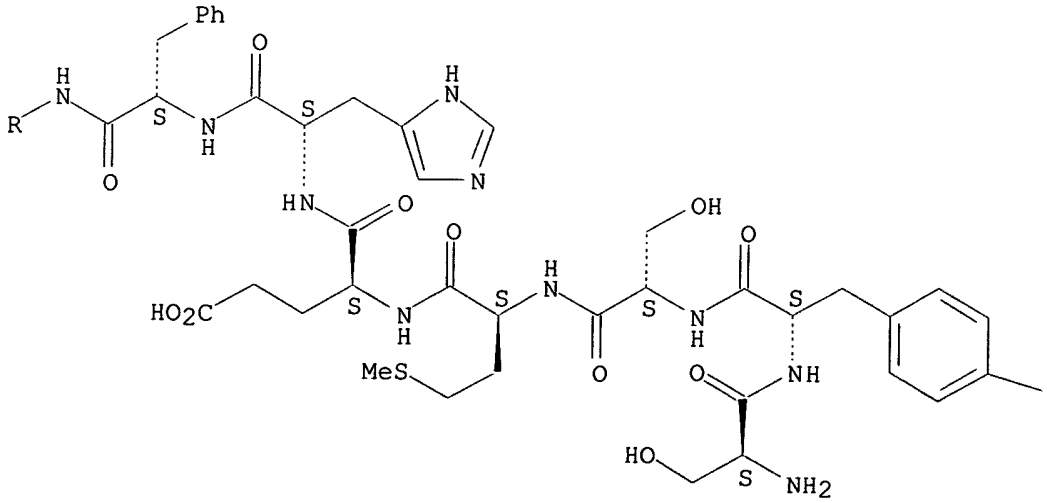
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PAGE 2-B

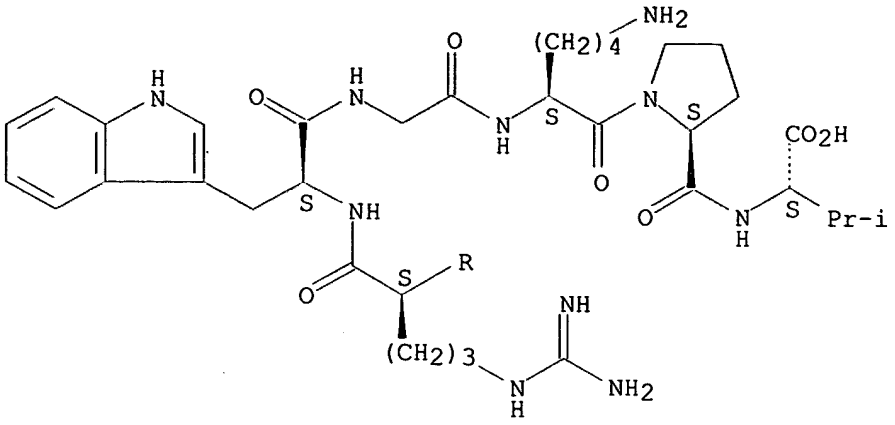
—OH

L7 ANSWER 77 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1974:141414 CAPLUS
DOCUMENT NUMBER: 80:141414
TITLE: .alpha.-MSH stimulation of growth hormone release
AUTHOR(S): Strauch, G.; Girault, D.; Rifai, M.; Bricaire, H.
CORPORATE SOURCE: Dep. Endocrinol. Metab., Hop. Cochin, Paris, Fr.
SOURCE: Journal of Clinical Endocrinology and Metabolism (1973), 37(6), 990-3
CODEN: JCEMAZ; ISSN: 0021-972X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Synthetic .alpha.-MSH [581-05-5] (0.5 mg, i.v.) which contains the same amino acid sequence as 1-13 ACTH induced growth hormone [9002-72-6] release in 18 of 23 male subjects with peak values occurring at 30-45 min. Apparently part of the ACTH molecule is identical or analogous to a still unknown growth hormone releasing factor but to date .alpha.-MSH is not known to be present in human hypothalamus.
IT **22006-64-0**
RL: BIOL (Biological study)
(growth hormone release by)
RN 22006-64-0 CAPLUS
CN .alpha.1-13-Corticotropin (8CI, 9CI) (CA INDEX NAME)

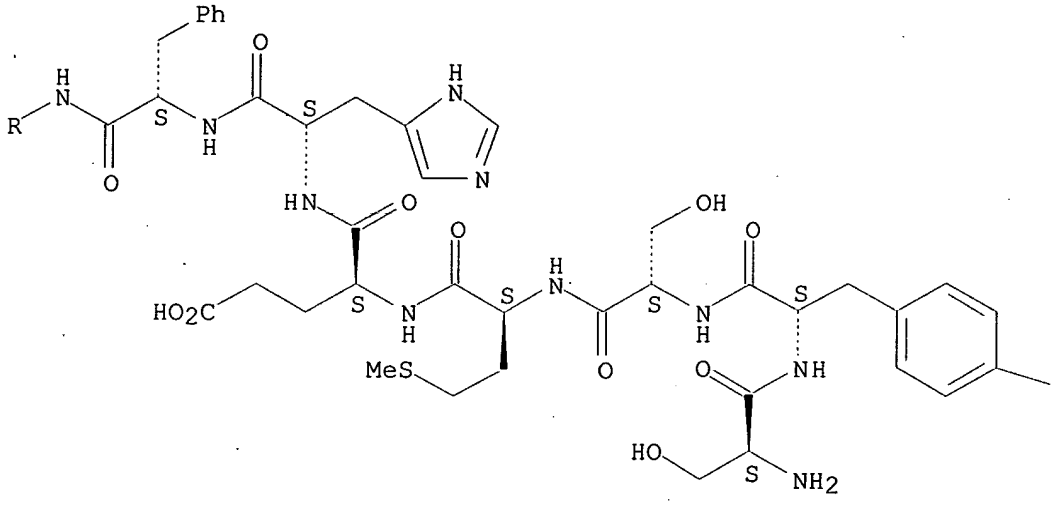
SEQ 1 SYSMEHFRWG KPV

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PAGE 2-B

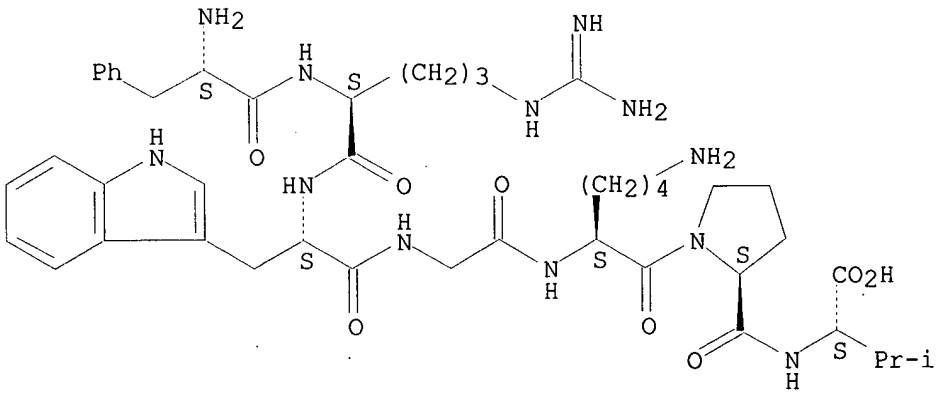
L7 ANSWER 78 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1971:473812 CAPLUS
DOCUMENT NUMBER: 75:73812
TITLE: Radioimmunoassay for rat plasma ACTH
AUTHOR(S): Rees, Lesley H.; Cook, D. M.; Kendall, J. W.; Allen, Catherine F.; Kramer, Rosanne M.; Ratcliff, J. G.; Knight, R. A.
CORPORATE SOURCE: Med. Sch., Univ. Oregon, Portland, OR, USA
SOURCE: Endocrinology (1971), 89(1), 254-61
CODEN: ENDOAO; ISSN: 0013-7227
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A radioimmunoassay of plasma ACTH, useful for several mammalian species, was adapted for the rat. The antibody permitting this versatility was produced in the rabbit by immunization with the species-common, steroidogenic 1-24 amino acid sequence of ACTH. Binding studies, using polypeptide fragments of ACTH, showed that the antibody bound most effectively with the 1-24 fragment and nearly as effectively with the 1-39 native human and porcine mols. The antibody failed to react significantly with .alpha.MSH, .beta.p-MSH, or with synthetic 1-16 amide or .alpha.p 17-39 fragments of ACTH. A close similarity was found between bioactivity and immunoreactivity in 3 tested specimens of rat plasma. Physiol. validation of the method was obtained from the following studies. The immunoreactive plasma ACTH concn. at 9 a.m. in resting male rats was 23 pg/ml, when the plasma corticosterone concn. was 4 .mu.g/100 ml. At 4:30 p.m., plasma ACTH was 63 pg/ml and plasma corticosterone was 13 .mu.g/100 ml. Intact male rats had elevations of immunoreactive plasma ACTH to 252-1910 pg/ml 2.5 min after the onset of ether stress. Adrenalectomized resting rats had elevated levels 24 hr, 7 days, and 60 days postadrenalectomy. Their values were 195 .+-. 22, 277 .+-. 87, and 364 .+-. 75 pg/ml, resp. Ether-stressed rats, 24 hr, 7 days, and 60 days after adrenalectomy had levels of 1010 .+-. 232, 3375 .+-. 340, and 7325 .+-. 1103 pg/ml, resp.

IT **33440-05-0**
RL: BIOL (Biological study)
(immunoreactivity of)
RN 33440-05-0 CAPLUS
CN L-Valine, L-phenylalanyl-L-arginyl-L-tryptophylglycyl-L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

SEQ 1 FRWGKPV

Absolute stereochemistry.



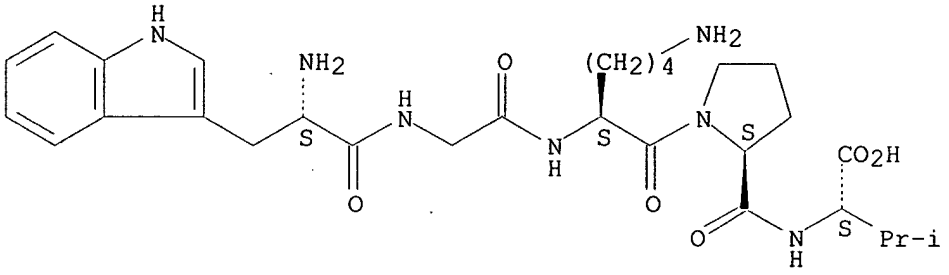
L7 ANSWER 79 OF 79 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1964:462503 CAPLUS
DOCUMENT NUMBER: 61:62503
ORIGINAL REFERENCE NO.: 61:10887a-b
TITLE: On the prediction of partition coefficients and Rf values of peptides
AUTHOR(S): Legge, J. W.; Morieson, A. S.
CORPORATE SOURCE: Univ. Melbourne
SOURCE: Australian Journal of Biological Sciences (1964), 17(2), 561-71
CODEN: AJBSAM; ISSN: 0004-9417
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB The partition coeffs. of 17 amino acids and 25 peptides were detd. in BuOH- 0.5% CCl3COOH. Partition coeffs. for .beta.-corticotropin (I) and some large peptides derived from it are then calcd. and compared with reported values. Rf values reported for paper chromatography of I fragments with BuOH-HOAc-H2O agree reasonably with those predicted from Rf values of the constituent amino acids, but, due to absorption, are of little value in predicting partition coeffs. in liquid-liquid systems.

IT **81156-21-0**, Valine, N-[1-[N2-(N-tryptophylglycyl)lysyl]prolyl]-
(partition coeffs. and Rf values of, calcn. of)
RN 81156-21-0 CAPLUS
CN L-Valine, L-tryptophylglycyl-L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)

SEQ 1 WGKPV

Absolute stereochemistry.



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